CONTENTS

A. INTRODUCTION

This manual provides instructions to mortality medical coders and nosologists for coding multiple causes of death from death certificates filed in the states. These mortality coding instructions are used by both the state vital statistics programs and the National Center for Health Statistics (NCHS), which is the Federal agency responsible for the compilation of U.S. statistics on causes of death. NCHS is part of the Centers for Disease Control and Prevention.

In coding causes of death, NCHS adheres to the World Health Organization Nomenclature Regulations specified in the most recent revision of the International Statistical Classification of Diseases and Related Health Problems (ICD). NCHS also uses the ICD international rules for selecting the underlying cause of death for primary mortality tabulation in accordance with the international rules.

Beginning with deaths occurring in 1999, the Tenth Revision of the ICD (ICD-10) is being used for coding and classifying causes of death. This revision of the Classification is published by the World Health Organization (WHO) and consists of three volumes. Volume 1 contains a list of three-character categories, the tabular list of inclusions, and the four-character subcategories. The supplementary Z code appears in Volume 1 but is not used for classifying mortality data. Optional fifth characters are provided for certain categories and an optional independent four-character coding system is provided to classify histological varieties of neoplasm, prefixed by the letter M (for morphology) and followed by a fifth character indicating behavior. These optional codes, except those for place of occurrence of external cause and activity code related to external cause codes, are not used in NCHS. The place code and activity code are used as supplementary codes rather than as additional characters. Volume 2 includes the international rules and notes for use in classifying and tabulating underlying cause of death data. Volume 3 is an alphabetical index containing a comprehensive list of terms for use in coding. Copies of these volumes may be purchased in hard-copy or on diskette from the following address:

WHO Publications Center
49 Sheridan Avenue
Albany, New York 12210
Tel. 518-436-9686

SECTION I Introduction

NCHS has prepared an updated version of Volume 1 and Volume 3 to be used for both underlying and multiple cause-of-death coding. The major purpose of the updated version is to provide a single published source of code assignments including terms not indexed in Volume 3 of ICD-10. NCHS has included all nonindexed terms encountered in the coding of deaths during 1979-1994, under the Ninth Revision of the International Classification of Diseases (ICD-9). With the availability of the updated Volumes 1 and 3, NCHS will discontinue publishing the Part 2e manual, Nonindexed Terms, Standard Abbreviations, and State Geographic Codes Used in Mortality Data Classification, which was first published in 1983. Due to copyright considerations, the updated Volumes 1 and 3 may not be reproduced for distribution outside of NCHS and State vital statistics agencies.

The basic purpose of this manual is to document concepts and instructions for coding multiple causes of death, which were developed by NCHS for use with the Eighth Revision of the ICD adapted for use in the United States (ICDA-8), and which were updated to ICD-9, and subsequently to ICD-10. The coding concepts are generally consistent with provisions of ICD-10. Thus, this manual should be used with ICD-10, Volumes 1 and 3 as updated by NCHS. The list of abbreviations used in medical terminology (Appendix A), the list of synonymous sites (Appendix B), and the list of geographic codes (Appendix C) are included in this publication. Since input format and positions vary according to the type of data entry equipment being used, the instructions for entering the identifying information and ICD-10 codes for death certificates are in Part 2d, Procedures for Mortality Medical Data System File Preparation and Maintenance. Part 2d contains instructions for use of transcription sheets for manual entry of codes with subsequent keying of records by various types of key entry equipment, and instructions for simultaneous coding\data entry various types of equipment.

NCHS does not use the “dagger and asterisk” system which WHO introduced in ICD-9 and continued in ICD-10. For some medical conditions, this system provides two codes, which distinguish between the etiology or underlying disease process and the manifestation or complication for selected conditions. The etiology or underlying disease codes is denoted with a dagger (†) and the manifestation or complication code by an asterisk (*) following the code. For example, Coxsackie myocarditis has a code (B33.2†) marked with a dagger in the chapter for infectious and parasitic diseases and a different code (I41.1*) marked with an asterisk in the chapter for diseases of the circulatory system. Similarly, diabetic nephropathy has a dagger code (E14.2 †) in the chapter relating to endocrine disease and an asterisk code (N08.3*) in the genitourinary system chapter. Under ICD-9, limited use was made of the asterisk codes in classifying mortality data for data years 1979-1982. Effective July 1982 the use of asterisk codes in mortality coding was discontinued and will not be used in the 10th revision for mortality coding. NCHS assigns only the dagger code to such conditions.

SECTION I Introduction

The multiple cause-of-death codes are used as inputs to the ACME program (Automated Classification of Medical Entities) developed by NCHS to automatically select the underlying cause of death, and the TRANSAX program (Translation of Axes) used to produce multiple cause-of-death statistics, beginning with deaths occurring in 1968. As inputs, the computer programs require codes for each condition reported on the death certificate, usually in the order in which the information is recorded.

The outputs of the ACME program are the traditional underlying cause-of-death codes selected according to the selection and modification rules of the Classification, the same cause that would be selected using manual underlying cause-of-death coding instructions specified in Instruction Manual Part 2a. Thus, a single cause is associated with each decedent.

Using the same input codes, the TRANSAX program generates two sets of outputs: "entity-axis" codes that reflect the placement of each condition on the certificate for each decedent; and "record-axis" codes that, where appropriate, link two or more diagnostic conditions to form composite codes that are classifiable to a single code, according to the provisions of the Classification. Record axis codes are preferred for multiple cause tabulation to better convey the intent of the certifier, and to eliminate redundant cause-of-death information (See Instruction Manual Part 2f).

SECTION I Introduction

Major Revisions from Previous Manuals

1. All information from the 2002 erratas has been incorporated into this edition .

2. Corrections have been made to clarify instructions, spelling, and format throughout the manual. These changes are not specifically noted.

3. A revised copy of the Standard Certificate of Death proposed for 2003 is included though not officially approved at the time of printing.

4. Section II, Part B, "All-inclusive list" was changed to read "These instructions apply to these adjectival modifiers **only**."

5. Section II, Part B, example added indicating combination codes indexed as "with" in Volume 3 are not used.

6. Section II, Part C, instructions for coding medical conditions reported in the duration box were added.

7. Section II, Part J, Additional Information instructions were added stating to begin coding with the AI reported uppermost on the certificate and move downward from left to right.

8. Section III, Intent of Certifier, instructions and examples were added regarding infectious conditions and organisms separated by connecting terms.

9. Section III, Intent of Certifier, Alcohol, was updated and reorganized.

10. Section III, Intent of Certifier, added instructions for tobacco use.

11. Section III, Intent of Certifier, Septal Defect, a statement was added "providing there is no indication the defect is congenital."

12. Section IV, Part A, a statement and an example were added to emphasize that metastatic neoplasms are **always** malignant.

13. Section IV, Part C, revised pregnancy instructions to address the addition of a pregnancy item on the 2003 Standard Certificate of Death.

14. An example was added to Section IV, Part E, demonstrating how to code a statement of "23 weeks."

15. Section V, Part E, Conditions qualified as traumatic, instructions have been reorganized and poisoning added as an Exception.

16. Section V, Part F, anthrax instructions were added.

17. Section V, Part G, the instructions for coding multiple injuries has changed.

18. Section V, Part J, Transportation Accidents, a statement was added to additional information about type of transports: (5) Motor vehicle includes passenger vehicle (private).

19. Section V, Part R, added an instruction to clarify "underlying" when identifying the reason for medical care.

20. Section V, Part R, cerebral hemorrhage was removed from the list of terms not considered complications of surgery.

21. Section V, Part R, the term "following radiation" has been added to the instructions for coding complications of radiation and the first part of these instructions have been reorganized.

22. Section V, Part R, example has been added demonstrating that HIV reported due to blood transfusion is not a complication.

23. Section V, Part S, an instruction was added to the sequela of external causes regarding more than one injury or external cause reported with one duration.

24. Appendix A, editing corrections were made and abbreviations added.

25. Appendix C, Geographic Codes, were amended to use only alpha abbreviations and Territorial Codes were added.

26. All activity code instructions were moved to Appendix E.

27. Terrorism instructions were added as Appendix G.

28. Additional drug examples were added as Appendix H.

Other manuals relating to coding causes of death are:

Part 2a, NCHS Instructions for Classifying the Underlying Cause of Death, 2003

Part 2c, ICD-10 ACME Decision Tables for Classifying the Underlying Causes of Death, 2003

Part 2d, Procedures for Mortality Medical Data System File Preparation and Maintenance

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B. MEDICAL CERTIFICATION

The U. S. Standard Certificate of Death provides spaces for the certifying physician, coroner, or medical examiner to record pertinent information concerning the diseases, morbid conditions, and injuries which either resulted in or contributed to death as well as the circumstances of the accident or violence which produced any such injuries. The medical certification portion of the death certificate includes items 32-44. It is designed to obtain the opinion of the certifier as to the relationship and relative significance of the causes, which he reports.

A cause of death is the morbid condition or disease process, abnormality, injury, or poisoning leading directly or indirectly to death. The underlying cause of death is the disease or injury, which initiated the train of morbid events leading directly or indirectly to death or the circumstances of the accident or violence, which produced the fatal injury. A death often results from the combined effect of two or more conditions. These conditions may be completely unrelated, arising independently of each other or they may be causally related to each other; that is, one cause may lead to another which in turn leads to a third cause, etc.

The order in which the certifier is requested to arrange the causes of death upon the certification form facilitates the selection of the **underlying cause** when two or more causes are reported. He is requested to report in Part I on line (a) the immediate cause of death and the antecedent conditions on lines (b), (c), and (d) which gave rise to the cause reported on I(a), **the underlying cause** being stated lowest in the sequence of events. However, no entry is necessary on I(b), I(c), or I(d) if the immediate cause of death, stated on I(a) describes completely the sequence of events. If the decedent had more than four causally related conditions relating to death, the certifier is requested to add lines (e), (f), etc., so all conditions related to the immediate cause of death are entered in Part I with only one condition to a line.

Any other significant condition which unfavorably influenced the course of the morbid process and thus contributed to the fatal outcome but not resulting in the underlying cause given in Part I is entered in Part II.

SECTION I — Medical Certification

Excerpt from DRAFT 07/08/2002 U.S. STANDARD DEATH CERTIFICATE

NAME OF DECEDENT
For use by physician or institution

To Be Completed/Verified By: FUNERAL DIRECTOR

1. DECEDENT'S LEGAL NAME (Include AKA's if any) (First, Middle, Last) | 2. SEX | 3. SOCIAL SECURITY NUMBER

4a. AGE-Last Birthday (Years) | 4b. UNDER 1 YEAR: Months, Days | 4c. UNDER 1 DAY: Hours, Minutes | 5. DATE OF BIRTH (Mo/Day/Yr) | 6. BIRTHPLACE (City and State or Foreign Country)

7a. RESIDENCE-STATE | 7b. COUNTY | 7c. CITY OR TOWN

7d. STREET AND NUMBER | 7e. APT. NO. | 7f. ZIP CODE | 7g. INSIDE CITY LIMITS? ☐ Yes ☐ No

8. EVER IN US ARMED FORCES? ☐ Yes ☐ No

9. MARITAL STATUS AT TIME OF DEATH ☐ Married ☐ Married, but separated ☐ Widowed ☐ Divorced ☐ Never Married ☐ Unknown

10. SURVIVING SPOUSE'S NAME (If wife, give name prior to first marriage)

11. FATHER'S NAME (First, Middle, Last)

12. MOTHER'S NAME PRIOR TO FIRST MARRIAGE (First, Middle, Last)

13a. INFORMANT'S NAME | 13b. RELATIONSHIP TO DECEDENT | 13c. MAILING ADDRESS (Street and Number, City, State, Zip Code)

14. PLACE OF DEATH (Check only one: see instructions)

IF DEATH OCCURRED IN A HOSPITAL: ☐ Inpatient ☐ Emergency Room/Outpatient ☐ Dead on Arrival

IF DEATH OCCURRED SOMEWHERE OTHER THAN A HOSPITAL: ☐ Hospice facility ☐ Nursing home/Long term care facility ☐ Decedent's home ☐ Other (Specify):

15. FACILITY NAME (If not institution, give street & number) | 16. CITY OR TOWN, STATE, AND ZIP CODE | 17. COUNTY OF DEATH

18. METHOD OF DISPOSITION: ☐ Burial ☐ Cremation ☐ Donation ☐ Entombment ☐ Removal from State ☐ Other (Specify):_____

20. LOCATION-CITY, TOWN, AND STATE | 21. NAME AND COMPLETE ADDRESS OF FUNERAL FACILITY

22. SIGNATURE OF FUNERAL SERVICE LICENSEE OR OTHER AGENT | 23. LICENSE NUMBER (Of Licensee)

To Be Completed By: MEDICAL CERTIFIER

ITEMS 24-28 MUST BE COMPLETED BY PERSON WHO PRONOUNCES OR CERTIFIES DEATH

24. DATE PRONOUNCED DEAD (Mo/Day/Yr) | 25. TIME PRONOUNCED DEAD

26. SIGNATURE OF PERSON PRONOUNCING DEATH (Only when applicable) | 27. LICENSE NUMBER | 28. DATE SIGNED (Mo/Day/Yr)

29. ACTUAL OR PRESUMED DATE OF DEATH (Mo/Day/Yr) (Spell Month) | 30. ACTUAL OR PRESUMED TIME OF DEATH | 31. WAS MEDICAL EXAMINER OR CORONER CONTACTED? ☐ Yes ☐ No

CAUSE OF DEATH (See instructions and examples)

Approximate interval: Onset to death

32. PART I. Enter the chain of events--diseases, injuries, or complications--that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE. Enter only one cause on a line. Add additional lines if necessary.

IMMEDIATE CAUSE (Final disease or condition ——> resulting in death) a._____ Due to (or as a consequence of):

Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST
b._____ Due to (or as a consequence of):
c._____ Due to (or as a consequence of):
d._____

PART II. Enter other significant conditions contributing to death but not resulting in the underlying cause given in PART I.

33. WAS AN AUTOPSY PERFORMED? ☐ Yes ☐ No

34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? ☐ Yes ☐ No

35. DID TOBACCO USE CONTRIBUTE TO DEATH? ☐ Yes ☐ Probably ☐ No ☐ Unknown

36. IF FEMALE: ☐ Not pregnant within past year ☐ Pregnant at time of death ☐ Not pregnant, but pregnant within 42 days of death ☐ Not pregnant, but pregnant 43 days to 1 year before death ☐ Unknown if pregnant within the past year

37. MANNER OF DEATH ☐ Natural ☐ Homicide ☐ Accident ☐ Pending Investigation ☐ Suicide ☐ Could not be determined

38. DATE OF INJURY (Mo/Day/Yr) (Spell Month) | 39. TIME OF INJURY | 40. PLACE OF INJURY (e.g., Decedent's home; construction site; restaurant; wooded area) | 41. INJURY AT WORK? ☐ Yes ☐ No

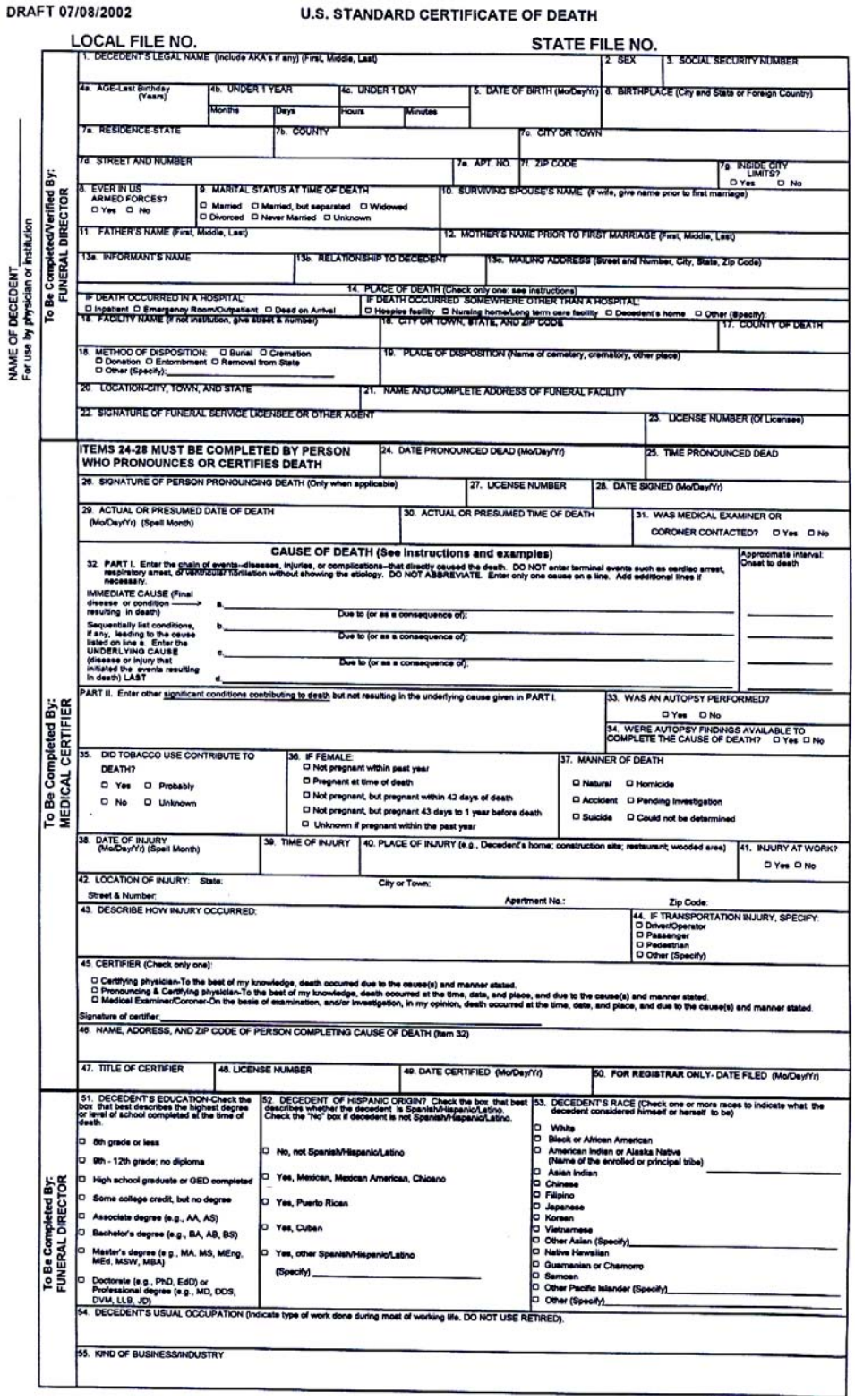
42. LOCATION OF INJURY: State: City or Town: Street & Number: Apartment No.: Zip Code:

43. DESCRIBE HOW INJURY OCCURRED:

44. IF TRANSPORTATION INJURY, SPECIFY: ☐ Driver/Operator ☐ Passenger ☐ Pedestrian ☐ Other (Specify)

SECTION I — Medical Certification

STANDARD DEATH CERTIFICATE



DRAFT 07/08/2002

U.S. STANDARD CERTIFICATE OF DEATH

LOCAL FILE NO. STATE FILE NO.

NAME OF DECEDENT
For use by physician or institution

To Be Completed/Verified By: FUNERAL DIRECTOR

1. DECEDENT'S LEGAL NAME (Include AKA's if any) (First, Middle, Last)
2. SEX
3. SOCIAL SECURITY NUMBER
4a. AGE-Last Birthday (Years)
4b. UNDER 1 YEAR — Months / Days
4c. UNDER 1 DAY — Hours / Minutes
5. DATE OF BIRTH (Mo/Day/Yr)
6. BIRTHPLACE (City and State or Foreign Country)
7a. RESIDENCE-STATE
7b. COUNTY
7c. CITY OR TOWN
7d. STREET AND NUMBER
7e. APT. NO.
7f. ZIP CODE
7g. INSIDE CITY LIMITS? ☐ Yes ☐ No
8. EVER IN US ARMED FORCES? ☐ Yes ☐ No
9. MARITAL STATUS AT TIME OF DEATH ☐ Married ☐ Married, but separated ☐ Widowed ☐ Divorced ☐ Never Married ☐ Unknown
10. SURVIVING SPOUSE'S NAME (If wife, give name prior to first marriage)
11. FATHER'S NAME (First, Middle, Last)
12. MOTHER'S NAME PRIOR TO FIRST MARRIAGE (First, Middle, Last)
13a. INFORMANT'S NAME
13b. RELATIONSHIP TO DECEDENT
13c. MAILING ADDRESS (Street and Number, City, State, Zip Code)
14. PLACE OF DEATH (Check only one; see instructions)
IF DEATH OCCURRED IN A HOSPITAL: ☐ Inpatient ☐ Emergency Room/Outpatient ☐ Dead on Arrival
IF DEATH OCCURRED SOMEWHERE OTHER THAN A HOSPITAL: ☐ Hospice facility ☐ Nursing home/Long term care facility ☐ Decedent's home ☐ Other (Specify):
15. FACILITY NAME (If not institution, give street & number)
16. CITY OR TOWN, STATE, AND ZIP CODE
17. COUNTY OF DEATH
18. METHOD OF DISPOSITION: ☐ Burial ☐ Cremation ☐ Donation ☐ Entombment ☐ Removal from State ☐ Other (Specify):
19. PLACE OF DISPOSITION (Name of cemetery, crematory, other place)
20. LOCATION-CITY, TOWN, AND STATE
21. NAME AND COMPLETE ADDRESS OF FUNERAL FACILITY
22. SIGNATURE OF FUNERAL SERVICE LICENSEE OR OTHER AGENT
23. LICENSE NUMBER (Of Licensee)

To Be Completed By: MEDICAL CERTIFIER

ITEMS 24-28 MUST BE COMPLETED BY PERSON WHO PRONOUNCES OR CERTIFIES DEATH
24. DATE PRONOUNCED DEAD (Mo/Day/Yr)
25. TIME PRONOUNCED DEAD
26. SIGNATURE OF PERSON PRONOUNCING DEATH (Only when applicable)
27. LICENSE NUMBER
28. DATE SIGNED (Mo/Day/Yr)
29. ACTUAL OR PRESUMED DATE OF DEATH (Mo/Day/Yr) (Spell Month)
30. ACTUAL OR PRESUMED TIME OF DEATH
31. WAS MEDICAL EXAMINER OR CORONER CONTACTED? ☐ Yes ☐ No

CAUSE OF DEATH (See Instructions and examples)

32. PART I. Enter the chain of events--diseases, injuries, or complications--that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE. Enter only one cause on a line. Add additional lines if necessary.
IMMEDIATE CAUSE (Final disease or condition ——> resulting in death) a. ____ Due to (or as a consequence of):
Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST b. ____ Due to (or as a consequence of): c. ____ Due to (or as a consequence of): d. ____
Approximate interval: Onset to death

PART II. Enter other significant conditions contributing to death but not resulting in the underlying cause given in PART I.
33. WAS AN AUTOPSY PERFORMED? ☐ Yes ☐ No
34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? ☐ Yes ☐ No

35. DID TOBACCO USE CONTRIBUTE TO DEATH? ☐ Yes ☐ Probably ☐ No ☐ Unknown
36. IF FEMALE: ☐ Not pregnant within past year ☐ Pregnant at time of death ☐ Not pregnant, but pregnant within 42 days of death ☐ Not pregnant, but pregnant 43 days to 1 year before death ☐ Unknown if pregnant within the past year
37. MANNER OF DEATH ☐ Natural ☐ Homicide ☐ Accident ☐ Pending Investigation ☐ Suicide ☐ Could not be determined
38. DATE OF INJURY (Mo/Day/Yr) (Spell Month)
39. TIME OF INJURY
40. PLACE OF INJURY (e.g., Decedent's home; construction site; restaurant; wooded area)
41. INJURY AT WORK? ☐ Yes ☐ No
42. LOCATION OF INJURY: State: City or Town: Street & Number: Apartment No.: Zip Code:
43. DESCRIBE HOW INJURY OCCURRED:
44. IF TRANSPORTATION INJURY, SPECIFY: ☐ Driver/Operator ☐ Passenger ☐ Pedestrian ☐ Other (Specify)
45. CERTIFIER (Check only one):
☐ Certifying physician-To the best of my knowledge, death occurred due to the cause(s) and manner stated.
☐ Pronouncing & Certifying physician-To the best of my knowledge, death occurred at the time, date, and place, and due to the cause(s) and manner stated.
☐ Medical Examiner/Coroner-On the basis of examination, and/or investigation, in my opinion, death occurred at the time, date, and place, and due to the cause(s) and manner stated.
Signature of certifier:
46. NAME, ADDRESS, AND ZIP CODE OF PERSON COMPLETING CAUSE OF DEATH (Item 32)
47. TITLE OF CERTIFIER
48. LICENSE NUMBER
49. DATE CERTIFIED (Mo/Day/Yr)
50. FOR REGISTRAR ONLY- DATE FILED (Mo/Day/Yr)

To Be Completed By: FUNERAL DIRECTOR

51. DECEDENT'S EDUCATION-Check the box that best describes the highest degree or level of school completed at the time of death.
☐ 8th grade or less
☐ 9th - 12th grade; no diploma
☐ High school graduate or GED completed
☐ Some college credit, but no degree
☐ Associate degree (e.g., AA, AS)
☐ Bachelor's degree (e.g., BA, AB, BS)
☐ Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA)
☐ Doctorate (e.g., PhD, EdD) or Professional degree (e.g., MD, DDS, DVM, LLB, JD)
52. DECEDENT OF HISPANIC ORIGIN? Check the box that best describes whether the decedent is Spanish/Hispanic/Latino. Check the "No" box if decedent is not Spanish/Hispanic/Latino.
☐ No, not Spanish/Hispanic/Latino
☐ Yes, Mexican, Mexican American, Chicano
☐ Yes, Puerto Rican
☐ Yes, Cuban
☐ Yes, other Spanish/Hispanic/Latino (Specify)
53. DECEDENT'S RACE (Check one or more races to indicate what the decedent considered himself or herself to be)
☐ White
☐ Black or African American
☐ American Indian or Alaska Native (Name of the enrolled or principal tribe)
☐ Asian Indian
☐ Chinese
☐ Filipino
☐ Japanese
☐ Korean
☐ Vietnamese
☐ Other Asian (Specify)
☐ Native Hawaiian
☐ Guamanian or Chamorro
☐ Samoan
☐ Other Pacific Islander (Specify)
☐ Other (Specify)
54. DECEDENT'S USUAL OCCUPATION (Indicate type of work done during most of working life. DO NOT USE RETIRED).
55. KIND OF BUSINESS/INDUSTRY

In the following example, there are three causes reported. On line (c) the underlying cause is entered—congenital heart disease. Congenital heart disease gave rise to congestive heart failure (line (b)) which in turn led to a myocardial infarction (line (a)) -- the immediate cause of death.

I (a) Myocardial infarction
(b) Congestive heart failure
(c) Congenital heart disease
(d)
II

As demonstrated by the following example, the certifier may not always list one cause per line:

I (a) Myocardial infarction and pulmonary embolism with congestive heart failure
(b)
(c)
(d)
II

Likewise, the causes may not be reported in an acceptable sequence. In the following example, cancer is reported as due to diabetes.

I (a) Cancer
(b) Diabetes
(c)
(d)
II

To date, the causes of the majority of cancers are still unknown so the causal relationship tables stored in the NCHS computers preclude the assumption that diabetes caused the cancer. Cancer is selected as the underlying cause of death from this certification for statistical purposes. However, the selection of the underlying cause of death is not relevant for this manual. For coding purposes, the order and position of each cause of death reported on the death certificate must be interpreted accurately so the computer software can then determine the correct underlying cause of death.

There is an average of three causes listed per certificate. Approximately 20 percent have only one cause of death and 45 percent have three or more causes. Frequently, a cause will be reported on I(a) in Part I and a cause in Part II with no other reported causes. For other records, several causes may all be reported on a single line of the certificate or they may be entered on several lines in Part I. Rarely, the only cause(s) reported may be in Part II. Representative examples follow.

I (a) Pneumonia
(b)
(c)
(d)
II Diabetes

I (a) Cancer
(b)
(c)
(d)
II

I (a)
(b)
(c)
(d)
II Diabetes

I (a)
(b) Acute myocardial infarction
(c)
II Renal disease

I (a) AMI, renal disease, pulmonary embolism

A. Introduction

Code all information reported in the medical certification section of the death certificate and any other information pertaining to the medical certification, when reported elsewhere on the certificate. In Volumes 1 and 3 of ICD-10, the fourth-character subcategories of three-character categories are preceded by a decimal point. For coding purposes, omit the decimal point.

Enter codes in the same order and location as the entries they represent appear on the death certificate. Enter the codes for entries in Part II in the order the entries are reported, proceeding from the entry reported uppermost in Part II downward and from the left to right. If the uppermost line in Part II is an obvious continuation of a line below, enter the codes accordingly.

For instructions on placement of codes when the certifier states or implies a "due to" relationship between conditions not reported in sequential order, refer to Section II, Part C, Format. For instructions on placement of nature of injury (N-code) and external cause codes (E-codes), refer to Section V, Part B, Placement of Nature of Injury and External Cause Codes.

When an identical code applies to more than one condition reported on the same line, enter the code for the first-mentioned of these conditions only. When conditions classifiable to the same code are reported on different lines of the certificate, enter the code for each of the reported conditions. (This does not apply to external cause of morbidity and mortality (E-codes)).

1. Excessive Codes

   a. When a single line in Part I or Part II requires more than eight codes, delete the excessive codes (any over eight) for the line using the following criteria in the order listed:

      (1) Delete ill-defined conditions (I469, I959, I99, J960, J969, P285, R00-R94, R96, R98) except when this code is the first code on a line, proceeding right to left.

      (2) Delete nature of injury codes (S000-T983) except for the first one entered on a line, proceeding right to left.

      (3) If, after applying the preceding criteria, any single line still has more than eight codes, delete beginning with the last code on the line until only 8 remain.

I (a) I460
(b) I219 I739
(c)
(d)
II &E109 I739 T811 &Y835 R18 R33 N19 C475 N359 I490 I493 J181

After deleting excessive codes:
I (a) I460
(b) I219 I739
(c)
(d)
II &E109 I739 T811 &Y835 N19 C475 N359 I490

Delete (1) R33, (2) R18, (3) J181 and (4) I493

b. When a single record requires more than 14 codes, delete the excessive codes using the following criteria in the order listed:

(1) Delete ill-defined conditions (I469, I959, I99, J960, J969, P285, R00 - R94, R96, R98) except when this code is the first code on a line, beginning with the last code in Part II, proceeding right to left then upward right to left on each line (Part II, line e, line d, line c, line b, line a).

(2) Delete nature of injury codes (S000-T983) except for the first one entered on a line beginning with the last code in Part II, proceeding right to left then upward right to left on each line (Part II, line e, line d, line c, line b, line a).

(3) Delete repetitive codes except when it is the first code on a line beginning with the last code in Part II, proceeding right to left then upward right to left on each line (Part II, line e, line d, line c, line b, line a).

(4) If after applying the preceding criteria, any record still has more than 14 codes, delete beginning with the last code in Part II, proceeding upward right to left on each line (Part II, line e, line d, line c, line b, line a).

I (a) C80 I460 R570
(b) R098 R53
(c) R54 F09 F03
(d) I709 I635
II I119 C473 R200 I258 I251 D539 R798 I635

After deleting excessive codes:

I (a) C80 I460
(b) R098
(c) R54 F09 F03
(d) I709 I635
II I119 C473 I258 I251 D539 I635

Delete (1) R798, (2) R200, (3) R53 and (4) R570

2. Created Codes

To facilitate automated data processing, the following ICD-10 codes have been amended for use in coding and processing the multiple cause data. Special five character subcategories are for use in coding and processing the multiple cause data; however, they will not appear in official tabulations.

A169 Respiratory tuberculosis, unspecified
Excludes: Any term indexed in ICD-10 to A169 not qualified as respiratory or pulmonary (A1690)
*A1690 Tuberculosis NOS
Includes: Any term indexed in ICD-10 to A169 not qualified as respiratory or pulmonary

E039 Hypothyroidism, unspecified
Excludes: Any term indexed to E039 qualified as advanced, grave, severe, or with a similar qualifier (E0390)
*E0390 Advanced hypothyroidism
Grave hypothyroidism
Severe hypothyroidism
Includes: Any term indexed to E039 qualified as advanced, grave, severe, or with a similar qualifier

F03 Unspecified dementia
Excludes: Dementia indexed in ICD-10 to F03 not qualified as senile or presenile (F0300)
*F0300 Dementia NOS (brain, any part) (degenerative) (organic) (persisting) (primary)
Includes: Dementia indexed in ICD-10 to F03 not qualified as senile or presenile

G122 Motor neuron disease
Excludes: Any term indexed to G122 qualified as advanced, grave, severe, or with a similar qualifier (G1220)
*G1220 Advanced motor neuron disease
Grave motor neuron disease
Severe motor neuron disease
Includes: Any term indexed to G122 qualified as advanced, grave, severe, or with a similar qualifier

G20 Parkinson's disease
Excludes: Any term indexed to G20 qualified as advanced, grave, severe, or with a similar qualifier (G2000)
*G2000 Advanced Parkinson's disease
Grave Parkinson's disease
Severe Parkinson's disease
Includes: Any term indexed to G20 qualified as advanced, grave, severe, or with a similar qualifier

G309 Alzheimer's disease, unspecified
Excludes: Any term indexed to G309 qualified as advanced, grave, severe, or with a similar qualifier (G3090)
*G3090 Advanced Alzheimer's disease
Grave Alzheimer's disease
Severe Alzheimer's disease
Includes: Any term indexed to G309 qualified as advanced, grave, severe, or with a similar qualifier

G35 Multiple sclerosis
Excludes: Any term indexed to G35 qualified as advanced, grave, severe, or with a similar qualifier (G3500)
*G3500 Advanced multiple sclerosis
Grave multiple sclerosis
Severe multiple sclerosis
Includes: Any term indexed to G35 qualified as advanced, grave, severe, or with a similar qualifier

I500 Congestive heart failure
Excludes: Any term indexed to I500 qualified as advanced, grave, severe, or with a similar qualifier (I5000)
*I5000 Advanced congestive heart failure
Grave congestive heart failure
Severe congestive heart failure
Includes: Any term indexed to I500 qualified as advanced, grave, severe, or with a similar qualifier

I514 Myocarditis, unspecified
Excludes: Any term indexed in ICD-10 to I514 qualified as arteriosclerotic (I5140)
*I5140 Arteriosclerotic myocarditis
Includes: Any term indexed in ICD-10 to I514 qualified as arteriosclerotic

I515 Myocardial degeneration
Excludes: Any term indexed in ICD-10 to I515 qualified as arteriosclerotic (I5150)
*I5150 Arteriosclerotic myocardial degeneration
Includes: Any term indexed in ICD-10 to I515 qualified as arteriosclerotic

I600 Subarachnoid hemorrhage from carotid siphon and bifurcation
Excludes: Ruptured carotid aneurysm (into brain) (I6000)
*I6000 Ruptured carotid aneurysm (into brain)

I606 Subarachnoid hemorrhage from other intracranial arteries
Excludes: Ruptured aneurysm (congenital) circle of Willis (I6060)
*I6060 Ruptured aneurysm (congenital) circle of Willis

I607 Subarachnoid hemorrhage from intracranial artery, unspecified
Excludes: Ruptured berry aneurysm (congenital) brain (I6070)
Ruptured miliary aneurysm (I6070)
*I6070 Ruptured berry aneurysm (congenital) brain
Ruptured miliary aneurysm

I608 Other subarachnoid hemorrhage
Excludes: Ruptured aneurysm brain meninges (I6080)
Ruptured arteriovenous aneurysm (congenital) brain (I6080)
Ruptured (congenital) arteriovenous aneurysm cavernous sinus (I6080)
*I6080 Ruptured aneurysm brain meninges
Ruptured arteriovenous aneurysm (congenital) brain
Ruptured (congenital) arteriovenous aneurysm cavernous sinus

I609 Subarachnoid hemorrhage, unspecified
Excludes: Ruptured arteriosclerotic cerebral aneurysm (I6090)
Ruptured (congenital) cerebral aneurysm NOS (I6090)
Ruptured mycotic aneurysm brain (I6090)
*I6090 Ruptured arteriosclerotic cerebral aneurysm
Ruptured (congenital) cerebral aneurysm NOS
Ruptured mycotic aneurysm brain

J101 Influenza with other respiratory manifestations, influenza virus identified
Excludes: Influenza, flu, grippe (viral), influenza virus identified (without specified manifestations) (J1010)
*J1010 Influenza, flu, grippe (viral), influenza virus identified (without specified manifestations)

J111 Influenza with other respiratory manifestations, virus not identified
Excludes: Influenza, flu, grippe (viral), influenza virus not identified (without specified manifestations) (J1110)
*J1110 Influenza, flu, grippe (viral), influenza virus not identified (without specified manifestations)

J984 Other disorders of lung
Excludes: Lung disease (acute) (chronic) NOS (J9840)
*J9840 Lung disease (acute) (chronic) NOS

K319 Disease of stomach and duodenum, unspecified
Excludes: Disease, stomach NOS (K3190)
Lesion, stomach NOS (K3190)
*K3190 Disease, stomach NOS
Lesion, stomach NOS

K550 Acute vascular disorders of intestine
Excludes: Any term indexed in ICD-10 to K550 qualified as embolic (K5500)
*K5500 Acute embolic vascular disorders of intestine
Includes: Any term indexed in ICD-10 to K550 qualified as embolic

K631 Perforation of intestine (nontraumatic)
Excludes: Intestinal penetration, unspecified part (K6310)
Intestinal perforation, unspecified part (K6310)
Intestinal rupture, unspecified part (K6310)
*K6310 Intestinal penetration, unspecified part
Intestinal perforation, unspecified part
Intestinal rupture, unspecified part

K720 Acute and subacute hepatic failure
Excludes: Acute hepatic failure (K7200)
*K7200 Acute hepatic failure

K721 Chronic hepatic failure
Excludes: Chronic hepatic failure (K7210)
*K7210 Chronic hepatic failure

K729 Hepatic failure, unspecified
Excludes: Hepatic failure (K7290)
*K7290 Hepatic failure

M199 Arthrosis, unspecified
Excludes: Any term indexed to M199 qualified as advanced, grave, severe, or with a similar qualifier (M1990)
*M1990 Advanced arthrosis
Grave arthrosis
Severe arthrosis
Includes: Any term indexed to M199 qualified as advanced, grave, severe, or with a similar qualifier

Q278 Other specified congenital malformations of peripheral vascular system
Excludes: Congenital aneurysm (peripheral) (Q2780)
*Q2780 Congenital aneurysm (peripheral)

Q282 Arteriovenous malformation of cerebral vessels
Excludes: Congenital arteriovenous cerebral aneurysm (nonruptured) (Q2820)
*Q2820 Congenital arteriovenous cerebral aneurysm (nonruptured)

Q283 Other malformations of cerebral vessels
Excludes: Congenital cerebral aneurysm (nonruptured) (Q2830)
*Q2830 Congenital cerebral aneurysm (nonruptured)

R58 Hemorrhage, not elsewhere classified
Excludes: Hemorrhage of unspecified site (R5800)
*R5800 Hemorrhage of unspecified site

R99 Other ill-defined and unspecified causes of mortality
Excludes: Cause unknown (R97)
*R97 Cause unknown

3. "Dagger and asterisk" codes

ICD-10 provides for the classification of certain diagnostic statements according to two different axes-etiology or underlying disease process and manifestation or complication. Thus there are two codes for diagnostic statements subject to dual classification. The etiology or underlying disease codes are marked with a dagger (†) and the manifestations or complication codes are marked with an asterisk (*) following the code. The terms classified to codes with an asterisk are to be coded to the dagger code for the term only. These codes will not appear in official tabulations on multiple cause data.

I (a) Salmonella meningitis A022

Use only the dagger code for multiple cause death coding.

Do not use the following ICD-10 codes for multiple cause coding:

D63*	H03*	I68*	M36*
D77*	H06*	I79*	M49*
E35*	H13*	I98*	M63*
E90*	H19*	J17*	M68*
F00*	H22*	J91*	M73*
F02*	H28*	J99*	M82*
G01*	H32*	K23*	M90*
G02*	H36*	K67*	N08*
G05*	H42*	K77*	N16*
G07*	H45*	K87*	N22*
G13*	H48*	K93*	N29*
G22*	H58*	L14*	N33*
G26*	H62*	L45*	N37*
G32*	H67*	L54*	N51*
G46*	H75*	L62*	N74*
G53*	H82*	L86*	P75*
G55*	H94*	L99*	
G59*	I32*	M01*	
G63*	I39*	M03*	
G73*	I41*	M07*	
G94*	I43*	M09*	
G99*	I52*	M14*	

B. General coding concept

The coding of cause of death information for the ACME system consists of the assignment of the most appropriate ICD-10 code(s) for each diagnostic entity that is reported on the death certificate. In order to arrive at the appropriate code for a diagnostic entity, code each entity separately. Do not apply provisions in ICD-10 for linking two or more diagnostic terms to form a composite diagnosis classifiable to a single ICD-10 code.

I	(a)	Cholecystitis with cholelithiasis	K819	K802

Code each entity separately even though the Index has provided for a combination code for cholecystitis with cholelithiasis.

I	(a)	Malignant neoplasm of colon with rectum	C189	C20

Code malignant neoplasm of colon and malignant neoplasm of rectum separately even though the Index has provided for a combination code for malignant neoplasm of colon with rectum.

I	(a)	Injury of intra-abdominal and intrathoracic organs	S369	S279

Code injury of each site separately even though the Index has provided for a combination code for intra-abdominal and intrathoracic injury.

1. Definitions and types of diagnostic entities

A diagnostic entity is a single term or a composite term, comprised of one word or of two or more adjoining words, that is used to describe a disease, nature of injury, or other morbid condition. In this manual diagnostic entity and diagnostic term are used interchangeably. A diagnostic entity may indicate the existence of a condition classifiable to a single ICD-10 category or it may contain elements of information that are classifiable to different ICD-10 categories. For coding purposes, it is necessary to distinguish between two different kinds of diagnostic entities – a "one-term entity," and a "multiple one-term entity."

a. One-term entity

A one-term entity is a diagnostic entity that is classifiable to a single ICD-10 code.

I	(a)	Pneumonia	J189
	(b)	Arteriosclerosis	I709
	(c)	Emphysema	J439

These terms are codable one-term entities.

I (a) Allergic vasculitis D690

This condition is indexed as one-term entity under "vasculitis"

I (a) Cerebral arteriosclerosis I672

This condition is indexed as one-term entity.

(1) A diagnostic term that contains one of the following adjectival modifiers indicates the condition modified has undergone certain changes and is considered to be a one-term entity.

adenomatous	hemorrhagic
anoxic	hypoxic
congestive	inflammatory
cystic	ischemic
embolic	necrotic
erosive	obstructed, obstructive
gangrenous	ruptured

(These instructions apply to these adjectival modifiers **only**)

For code assignment, apply the following criteria in the order stated.

(a) If the modifier and lead term are indexed together, code as indexed.

I (a) Embolic nephritis N058

The adjectival qualifier "embolic" is indexed under Nephritis.

(b) If the modifier is not indexed under the lead term, but "specified" is, use the code for specified (usually .8)

I (a) Obstructive cystitis N308

The adjective modifier "obstructive" is not indexed under cystitis. Code cystitis, specified NEC.

(c) If neither the modifier nor "specified" is indexed under the lead term, refer to Volume 1 under the NOS code for the lead term and look for a specified 4th character subcategory.

I (a) Hemorrhagic cardiomyopathy I428

Code hemorrhagic cardiomyopathy to I428, Other cardiomyopathies. "Hemorrhagic" is not indexed under cardiomyopathy, neither is Cardiomyopathy, specified NEC indexed. The Classification does provide a code, I428, for "Other cardiomyopathies" in Volume 1.

(d) If neither (a), (b), or (c) apply, code lead term without the modifier.

I (a) Adenomatous bronchiectasis J47

"Adenomatous" is not an index term qualifying bronchiectasis. Code bronchiectasis only, since there is no provision in the Classification for coding "other bronchiectasis."

Exception:

When a physical condition is reported as an adjective modifying a mental disorder for which the Classification provides a single code classifiable to F01-F09, disregard the indexing of these conditions and code as separate one-term entities. **This instruction does not apply when senile modifies a mental disorder.**

I (a) Arteriosclerotic dementia I709 F0300

Code as separate one-term entities. Disregard the Index since the single code is classifiable to F01-F09.

I (a) Senile dementia F03

Code senile dementia as indexed since this instruction does not apply when senile modifies a mental disorder.

b. Multiple one-term entity

A multiple one-term entity is a diagnostic entity consisting of two or more contiguous words on a line for which the Classification does not provide a single code for the entire entity but does provide a single code for each of the components of the diagnostic entity. Consider as a multiple one-term entity if each of the components can be considered as separate one-term entities, i.e., they can stand alone as separate diagnosis. Code each component of the multiple one-term entity as indexed and on the same line where reported.

I	(a) Myocardial infarction	I219		
	(b) Uremic acidosis	N19	E872	
	(c) Chronic nephritis	N039		

"Uremic acidosis" is not indexed as one-term entity. Code "uremia" and "acidosis" as separate one-term entities, each of which can stand alone as a diagnosis.

I	(a) Uremia	N19		
	(b) Diabetic heart disease	E149	I519	
	(c)			

"Diabetic heart disease" is not indexed as a one-term entity. Code "diabetic" and "heart disease" as separate one-term entities, each of which can stand alone as a diagnosis.

I	(a) Senile cardiovascular disease, MI	R54	I516	I219
	(b)			
	(c)			

"Senile cardiovascular disease." is not indexed as a one-term entity. Code "senile" and "cardiovascular disease" as separate one-term entities each of which can stand alone as a diagnosis.

Exception:

When any condition classifiable to I20-I25, except I250, or I60-I69 is qualified as "hypertensive," code to I20-I25 or I60-I69 **only**.

I	(a) Hypertensive arteriosclerotic cerebrovascular disease	I672

I	(a) Hypertensive myocardial ischemia	I259

(1) Code an adjective reported at the end of a diagnostic entity as if it preceded the entity. This applies whether reported in Part I or II.

I	(a) Arteriosclerosis, hypertensive	I10	I709	
	(b)			
	(c)			

The complete term is not indexed as a one-term entity. "Hypertensive" is an adjectival modifier; code as if it preceded the arteriosclerosis.

I (a) MI I219
(b)
(c)
II Coronary occlusion, arteriosclerotic I709 I219

"Coronary occlusion, arteriosclerotic" is not indexed as a one-term entity. Arteriosclerotic is an adjectival modifier; code as if it preceded the coronary occlusion.

(2) When a multiple one-term entity indicates a condition involving different sites or systems for which the Classification provides different codes, code the condition of each site or system separately. Where there is provision for coding the condition of one or more but not all of the sites or systems, code the conditions of the site(s) or system(s) that are indexed. Disregard the site(s) or system(s) for which the Classification does not provide a code.

I (a) Cardiac, respiratory, hepatic, renal failure I509 J969 K7290 N19

Code each site separately since the Classification provides a different code for each site.

I (a) Cerebro-hepatic failure K7290

"Hepatic failure" is the only term indexed. Do not enter a code for "cerebral failure."

I (a) Cardiopulmonary dysfunction I518
(b)

"Cardiac dysfunction" is the only term indexed. Do not enter a code for "pulmonary dysfunction."

c. Adjectival modifier reported with multiple conditions

(1) If an adjectival modifier is reported with more than one condition, modify only the first condition.

I (a) Arteriosclerotic cardiomyopathy and nephritis I251 N059

I (a) Diabetic coma and gangrene E140 R02

(2) If an adjectival modifier is reported with one condition and more than one site is reported, modify all sites.

I (a) Diabetic gangrene of hands and feet E145

I (a) Arteriosclerotic cardiovascular and cerebrovascular disease I250 I672

(3) When an adjectival modifier precedes two different diseases that are reported with a connecting term, modify only the first disease.

I (a) Arteriosclerotic cardiovascular disease and cerebrovascular disease I250 I679

2. Parenthetical entries

a. When one medical entity is reported, followed by another complete medical entity enclosed in parenthesis, disregard the parenthesis and enter as separate terms.

I (a) Heart dropsy I500
(b) Renal failure (CVRD) N19 I139

Code each medical entity as indexed.

Place 9 I (a) Pneumonia (aspiration) J189 T179 &W80

Code each medical entity as indexed.

b. When the adjectival form of words or qualifiers are reported in parenthesis, use these adjectives to modify the term preceding it.

I (a) Collapse of heart I509
(b) Heart disease (rheumatic) I099
(c)

Use the adjective to modify the term and code rheumatic heart disease.

c. If the term in parenthesis is not a complete term and is not a modifier, consider as part of the preceding term.

I (a) Metastatic carcinoma (ovarian) C56

Consider the site as part of the preceding term and code metastatic ovarian carcinoma.

I (a) Drug dependence (heroin) (cocaine) F112 F142

Consider the specified drugs as part of the preceding term and code heroin and cocaine dependence.

3. Special diagnostic entities

When a condition is qualified as "HIV-related," "AIDS-related," or is modified by "AIDS," or "HIV," disregard the indexing of these conditions and code as separate one-term entities.

I (a) HIV-related encephalopathy B24 G934

I (a) AIDS-related tuberculosis B24 A1690

I (a) AIDS encephalopathy B24 G934

I (a) HIV encephalopathy B24 G934

4. Plural form of disease

Do not use the plural form of a disease or the plural form of a site to indicate multiple.

I (a) Cardiac arrest I469
(b) Congenital defects Q899

Code I(b) Q899 (congenital defect); do not code as multiple (Q897).

5. Implied "disease"

When an adjectival form of a word, including one relating to a site or organ, is entered as a separate diagnosis, i.e., it is not part of an entry preceding or following it, assume the word "disease" after the adjective and code accordingly.

I (a) Congestive heart failure I500
(b) Myocardial I515

Code I(b) to I515, myocardial disease.

I (a) Coronary I251
(b) Hypertension I10
(c)

Code I(a) to I251, coronary disease. Coronary hypertension is not indexed.

C. Format

1. "Due to" relationships involving more than **four** causally related conditions

Four lines, (a), (b), (c), **and (d)** have been provided in Part I of the death certificate for reporting conditions involved in the sequence of events leading directly to death and for indicating the causal relationship of the reported conditions. In cases where the decedent had more than four causally related conditions leading to death, certifiers have been instructed to report all of these conditions and to add line, (e), to indicate the relationship of the conditions. In the ACME system, provision has been made for identifying conditions reported on the additional "due to" line in Part I. Code conditions reported on line (e) or in equivalent "due to" positions as having been reported on separate lines. (Refer to Section II, Part H, 2, Reject code 9, for instructions for coding certificates with conditions reported on more than **five** "due to" lines.)

I	(a)	Shock due to pneumonia	R579
	(b)	Rupture of esophageal varices	J189
	(c)	Cirrhosis of liver due to alcoholism	I859
	(d)		K746
	(e)		F102

2. Connecting terms

a. "Due to" written in or implied

When the certifier has stated that one condition was due to another or has used another connecting term that implies a due to relationship between conditions in Part I, enter the codes as though the conditions had been reported, one due to the other, on separate lines. Code the conditions on each of the remaining lines in Part I, if there are any, as though they had been reported on the succeeding line. (Refer to Section II, Part H, 2, Reject code 9 for instructions for coding certificates with more than four "due to" statements.)

I	(a)	Myocardial infarction as a result of	I219
	(b)	ASHD	I251

Interpret "as a result of" as "due to" and code the ASHD on I(b).

I	(a)	Stomach hemorrhage from gastric ulcer	K922
	(b)	Cholecystitis	K259
	(c)		K819

Because of the implied "due to," code the gastric ulcer on I(b) and the cholecystitis on I(c).

(1) The following connecting terms should be interpreted as meaning "due to" or "as a consequence of" when the entity immediately preceding and following these terms is a disease condition, nature of injury, or an external cause.

after	occurred after
arising in or during	occurred during
as (a) complication of	occurred in
as a result of	occurred when
because of	occurred while
caused by	origin
complication(s) of	received from
during	received in
etiology	resulting from
following	resulting when
for	secondary to (2°)
from	subsequent to
in	sustained as
incident to	sustained by
incurred after	sustained during
incurred during	sustained in
incurred in	sustained when
incurred when	sustained while
induced by	

I	(a) Myocardial infarction	I219
	(b) Nephritis due to arteriosclerosis	N059
	(c) Hypertension from toxic goiter	I709
	(d)	I10
	(e)	E050

Both "due to" and "from" indicate the conditions following these terms are moved to the next due to position.

I	(a) Complication from diabetes	E149

Since there is not a codable entry preceding the "due to" term, do not reformat diabetes.

(2) When one of the previous terms is the first entry in Part II, indicating that the following entry is a continuation of Part I, code in Part I in next due to position.

I	(a)	Respiratory failure	J969
	(b)	Cardiac arrest	I469
	(c)	Coronary occlusion	I219
	(d)		I251
II	due to ASHD		

Since Part II is indicated to be a continuation of Part I, code the ASHD on I(d).

(3) Certain connecting terms imply that the condition following the connecting term was "due to" the condition preceding it. In such cases, enter the code for the condition following the connecting term on the line above that for the condition that preceded it.

Interpret the following connecting terms as meaning that the condition following the term was due to the condition that preceded it:

as a cause of	led to
cause of	manifested by
caused	producing
causing	resulted in
followed by	resulting in
induced	underlying
leading to	with resultant
	with resulting

I	(a)	Myocardial infarction	I469
	(b)	followed by cardiac arrest	I219
	(c)		

<u>Code</u> the cardiac arrest on I(a) since "followed by" indicates it was due to the myocardial infarction.

I	(a)	Respiratory arrest	R092	
	(b)	Pulmonary edema	J81	
	(c)	Bronchitis with resulting pneumonia	J189	I469
	(d)	and cardiac arrest	J40	

<u>Code</u> the pneumonia and cardiac arrest on I(c) since "with resulting" indicates they were due to the bronchitis.

b. Not indicating a "due to" relationship

When conditions are separated by "and" or by another connecting term that does not imply a "due to" relationship, enter the codes for these conditions on the same line in the order that the conditions are reported on the certificate.

The following terms imply that conditions are meant to remain on the same line. They are separated by "and" or by another connecting term that does not **imply** a "due to" relationship:

and	consistent with
accompanied by	with ($\bar{c}$)
also	precipitated by
complicated by	predisposing (to)
complicating	superimposed on

I	(a) Acute bronchitis superimposed on	J209	J439
	(b) Emphysema		
	(c) Tobacco abuse (smokes 3 packs a day)	F171	F179

Interpret "superimposed on" as "and." Enter the code for the condition on I(b) as the second code on I(a). Do not enter a code on I(b).

I	(a) MI	I219	
	(b) ASHD	I251	
	(c) Hypertension	I10	E142
II	also diabetic nephropathy		

Consider "also" as a connecting word that does not imply "due to" and code Part II as a continuation of I(c).

3. Condition entered above line I(a)

When a condition is reported on the certificate above line I(a), enter the code for this condition on I(a). Code the condition(s) entered on line I(a) on line I(b); then code the conditions entered on each of the remaining line(s) in Part I as though they had been reported on the succeeding lines.

	Myocardial infarction	
I	(a) Pulmonary embolism	I219
	(b) Congestive heart failure	I269
	(c) Congenital heart disease	I500
	(d)	Q249

Code the condition entered above I(a) on I(a), then code the condition entered on I(a) on I(b); then code the conditions entered on each of the remaining line(s) in Part I as though they had been reported on the succeeding lines.

4. Condition reported between lines in Part I

When a condition is reported between I(a) and I(b) or I(b) and I(c) or I(c) and I(d), without a connecting term, enter the code for this condition on the following "due to" line. Code the conditions entered on each of the remaining line(s) in Part I as though they had been reported on the succeeding line.

I	(a) Pneumonia	J189
	Bronchitis	
	(b) Emphysema	J40
	(c) Cancer of lung	J439
	(d)	C349

Code the condition reported between lines I(a) and I(b) in the next "due to" position, and move the codes for conditions reported on lines I(b) and I(c) downward.

When a condition is reported between I(a) and I(b) or I(b) and I(c) or I(c) and I(d) with a connecting word, consider as a continuation of the line above and code accordingly unless there is a definite indication that it is a continuation of the line below.

I	(a) Cerebral hemorrhage	I619	I64
	c̄ CVA		
	(b) Cerebral arteriosclerosis	I672	

Code the condition entered between I(a) and I(b) as a continuation of I(a).

I	(a) Cerebral hemorrhage	I619	
	c̄ CVA		
	(b) Cerebral arteriosclerosis	I672	I64

Since the certifier indicated by an arrow that the condition entered between I(a) and I(b) was a continuation of I(b), code the CVA on I(b).

I (a)	Cerebrovascular accident due to cerebral hemorrhage	I64
(b)	Cerebral arteriosclerosis	I619
(c)		I672

Consider the condition entered between I(a) and I(b) as a continuation of I(a) and code accordingly.

5. Condition reported as due to I(a), I(b), or I(c)

When a condition(s) in Part I is reported with a specific statement interpreted or stated as "due to" another on lines I(a), I(b), I(c), or I(d), rearrange the codes according to the certifier's statement. **Do not apply** this instruction to such statements reported in Part II.

I (a)	Myocardial failure		I249
(b)	Pneumonia		I509
(c)	Myocardial ischemia due to (a)	3wks	J189

Accept the certifier's statement that the condition reported on I(c) is "due to" the condition on I(a). Move the codes for conditions reported on I(a) and I(b) downward. (Apply the duration on I(c) to the myocardial ischemia).

I (a)	Heart failure	I509	N19
(b)	Pneumonia	J189	
(c)	Uremia due to (b)		

Take into account the certifier's statement on I(c) and code the condition reported on I(c) as the second entry on I(a).

I (a)	Carcinomatosis	I469
(b)	Cancer of lung	C80
(c)	Cardiorespiratory arrest due to above	C349

Take into account the certifier's statement and code the cardiorespiratory arrest on I(a), then move the codes for the remaining conditions downward.

I (a)	Coronary thrombosis	I219
(b)	Chronic nephritis	N039
(c)	Arteriosclerosis	I709
II	Uremia caused by above	N19

Disregard the certifier's statement, "caused by above," reported in Part II.

6. Conditions reported in Part II

Enter the codes for entries in Part II in the order the entries are reported, proceeding from the entry reported uppermost in Part II downward and from left to right, if there is more than one entry on the same line. If the conditions are numbered, code in numerical order.

I	(a) MI	I219			
	(b) ASHD	I251			
	(c) Pneumonia				
II	Heart murmur, arteriosclerosis	J189	R011	I709	

7. Deletion of "due to" on the death certificate

When the certifier has indicated that conditions in Part I were not causally related by marking through items I(a), I(b), I(c), and /or I(d), or through the printed "due to, or as a consequence of" which appears below items I(a) – I(c) on the death certificate, proceed as follows:

a. If the deletion(s) indicates that none of the conditions in Part I were causally related, consider as though all of the conditions had been reported on the uppermost used line. In determining the order of the codes, proceed from I(a) downward and from left to right if more than one condition is reported on a line.

I	~~(a)~~ Heart disease	I519	I10	N039	
	~~(b)~~ Malignant hypertension				
	~~(c)~~ Chronic nephritis				
II	Cancer of kidney	C64			

I	(a) Cardiac failure	I509	I251	J439	J40
	~~(b)~~ Arteriosclerotic heart disease				
	~~(c)~~ Emphysema and bronchitis				
	(d)				

b. If only item I(b), I(c), or I(d) or the printed "due to, or as a consequence of" which appears below lines I(a), I(b), or I(c) is marked through, consider the condition(s) reported on the crossed out line as though reported as the last entry (or entries) on the preceding line.

I	(a) Diabetes	E149	N40
	(b)		
	~~(c)~~ BPH		
I	(a) Cardiac arrest	I469	K746
	~~(b)~~ Cirrhosis of liver		
	(c) Alcoholism	F102	
I	(a) Congestive failure	I500	I251
	~~(b)~~ ASHD		
	(c)		
II	Pneumonia	J189	
I	(a) Heart block	I459	
	(b) Degenerative myocarditis	I514	I619
	~~(c)~~ Cerebral hemorrhage		
II	Bronchopneumonia	J180	

c. If only one part of the printed "due to, or as a consequence of" which appears below I(a), I(b), and I(c) is marked through, consider the condition(s) reported on that line as though reported as the last entry (or entries) on the preceding line.

I	(a) Cardiorespiratory failure	R092	
	Due to, or as a consequence of		
	(b) Infarction of brain	I639	I259
	~~Due to,~~ or as a consequence of		
	(c) Ischemic heart disease		
	Due to, or as a consequence of		

Code ischemic heart disease as though reported as second entry on I(b).

8. Deletion of "Part II" on death certificate

When the certifier has marked through the printed Part II, code the condition(s) reported in Part II as the last entry on the lowest used line in Part I.

I	(a) Apoplectic coma	I64	
	(b) Ruptured aneurysm, brain	I6090	
	(c) Arteriosclerosis	I709	I10
	(d)		
~~II~~	and hypertension		

Since Part II is indicated to be a continuation of I(c), code hypertension as last entry on I(c).

I (a) Myocarditis I514 I219 I250 E149
~~(b)~~ M.I.
~~(c)~~ Cardiovascular arteriosclerosis
~~II~~ Diabetes

I (a) M.I. I219
(b) Uremia N19
(c) Arteriosclerosis I709 N059
~~II~~ Nephritis

9. Numbering of causes reported in Part I

a. When the certifier has numbered all causes or lines in Part I, that is 1, 2, 3, etc., code these entries as if reported on the same line. This instruction applies whether or not the numbering extends into Part II, and it also applies whether or not the "due to" below lines I(a) and/or I(b) and/or I(c) are marked through.

I (a) 1. Coronary thrombosis I219 I250 I10 I709 J1110
(b) 2. ASCVD
(c) 3. Hypertension and arteriosclerosis
II 4. Influenza

Code all the entries on I(a).

b. When part of the causes in Part I are numbered, make the interpretation for coding such entries on an individual basis.

I (a) 1. Bronchopneumonia J180 C169
(b) 2. Cancer of stomach
(c) Chronic nephritis N039

Enter the codes for the conditions numbered "1." and "2." on I(a) in the order indicated by the certifier. Do not enter a code on I(b); however, enter the code for the condition on I(c) on that line.

I (a) Bronchopneumonia J180
(b) 1. Cancer of stomach C169 N039
(c) 2. Chronic nephritis

Enter the codes for conditions numbered "1." and "2." on I(b) in the order indicated by the certifier. Do not enter a code on I(c).

I	(a)	Congestive heart failure	I500	
	(b)	Influenza	J1110	
	(c)	1. Pulmonary emphysema	J439	C349
II		2. Cancer of lung		

Code the condition numbered "2." as the second entry on I(c). Do not enter a code in Part II.

c. When the causes in Part I are numbered, and an entry is stated or implied as "due to" another, enter the code(s) connected by the stated or implied "due to" in the next "due to" position, followed by the codes for the **remaining numbered** causes.

I	(a)	1. Bronchopneumonia due to	J180		
	(b)	influenza	J1110	J841	J40
	(c)	2. Pulmonary fibrosis 3. Bronchitis			

Enter the code for the condition followed by the stated "due to" on I(b), followed by codes for the conditions numbered "2." and "3." Do not enter a code on I(c).

I	(a)	1. Pneumonia	J189	
	(b)	MI	I219	I251
	(c)	2. ASHD		

Code the condition numbered "2." as a continuation of I(b). Leave I(c) blank.

10. Punctuation marks

a. Disregard punctuation marks such as a period, comma, semicolon, colon, dash, slash, question mark, or exclamation mark when placed at the end of a line in Part I. Do not apply this instruction to a hyphen (-), which indicates a word is incomplete.

I	(a)	Myocardial infarct?	I219	
	(b)	Meningitis, mastoiditis	G039	H709
	(c)	Otitis media	H669	

Disregard the punctuation marks and code the conditions reported on I(a), I(b), and I(c) as indicated by the certifier.

I	(a) Chronic rheumatic		I099	I958
	(b) heart disease, chronic hypotension			
	(c) Cancer		C80	

Regard the conditions reported on I(b) as a continuation of I(a). Do not enter a code on I(b).

b. When conditions are separated by a slash (/), code each condition as indexed.

I	(a) Cardiac arrest/respiratory arrest/pneumonia		I469	R092	J189
	(b) ASHD		I251		

Disregard the slash and code conditions as indexed.

11. Conditions in the duration box

a. When a condition is entered in the duration block, code the condition on the same line where it is reported.

			Duration		
I	(a)	Arteriosclerotic heart disease	CVA	I251	I64
	(b)				
	(c)				
II	Arteriosclerosis			I709	

Code the condition reported in the duration block as the last entry on I(a).

D. Doubtful diagnosis

1. Doubtful qualifying expression

a. When expressions such as "apparently," "presumably," "?," "perhaps," and "possibly," qualify any condition, disregard these expressions and code condition as indexed.

I	(a)	? hemorrhage of stomach	K922
	(b)	Possible ulcer of stomach	K259

Disregard "?" and code hemorrhage of stomach on I(a) as reported. Disregard "possible" and code ulcer of stomach on I(b) as reported.

I	(a)	Heart disease, probable ASHD	I519	I251

Disregard "probable" and code heart disease and ASHD on I(a).

Place						
9	I	(a)	Pneumonia, probably aspiration	J189	T179	&W80

Disregard the "probably" and code both pneumonia and aspiration as indexed.

b. When these expressions are reported at the end of a line in Part I, **do not** consider to be a continuation of the next lower line.

I	(a)	Heart disease probably	I519
	(b)	Acute myocardial infarction	I219

Disregard "probably" and code heart disease on I(a) and acute myocardial infarction on I(b).

I	(a)	Cardiovascular disease presumably	I516
	(b)	Cerebral thrombosis	I633

Disregard "presumably" and code each condition on the line where it is reported.

c. When these expressions are reported at the beginning of a line in Part I, **do not** consider to be a continuation of the line above it.

I	(a)	Heart disease	I519
	(b)	Possibly acute myocardial infarction	I219

Disregard "possibly" and code each condition on the line where it is reported.

d. When these expressions are reported at the beginning of Part II, **do not** consider to be a continuation of Part I.

I	(a)	Heart disease probably	I519
	(b)		
	(c)		
II		Probably MI	I219

Disregard "probably" and code heart disease on I(a) and MI in Part II.

2. Interpretation of "either...or…"

Consider the following as a statement of "either or:"

- Two conditions reported on **one** line and **both** conditions qualified by expressions such as "apparently," "presumably," "?," "perhaps," and "possibly"

- Two or more conditions connected by "or" or "versus"

Code using the following instructions:

a. When a condition of more than one site is qualified by a statement of "either…or…" and both sites are classified to the **same system**, code the condition to the residual category for the **system**.

I	(a)	Pneumonia	J189
	(b)	Cancer of kidney or bladder	C689

Code I(b) C689, malignant neoplasm of other and unspecified urinary organs.

I	(a)	Heart failure	I509
	(b)	Coronary or pulmonary blood clot	I749

Code I(b) I749, blood clot.

b. When a condition of more than one site is qualified by a statement of "either…or…" and these sites are in different systems, code to the residual category for the disease or condition specified.

I	(a)	Cardiac arrest	I469
	(b)	Carcinoma of gallbladder or kidney	C80

Code I(b) C80, malignant neoplasm without specification of site.

I	(a)	Respiratory failure	J969
	(b)	Congenital anomaly of heart or lungs	Q899

Code I(b) Q899, anomaly, congenital, unspecified.

c. When conditions are qualified by a statement of "either…or…" and **only one site/system** is involved, code to the residual category for the site/system.

I	(a)	Apparently stroke, perhaps heart attack	I99

Since both conditions are preceded by a doubtful qualifying expression, consider as a statement of "either…or…." Stroke and heart attack are classified to the circulatory system. Code to disease, circulatory system, NEC.

I	(a)	Pulmonary edema	J81
	(b)	Tuberculosis or cancer of lung	J9840

Code I(b) J9840, lung disease NOS.

d. When conditions are classified to the same three character category with different fourth characters, code to the three character category with fourth character "9."

I	(a)	ASCVD vs ASHD	I259

Code to I259 the residual category. ASCVD and ASHD are both classified to 125.-, chronic ischemic heart disease.

e. When conditions are classified to different three character categories and Volume 1 provides a residual category for the diseases in general, code to that residual category.

I	(a)	MI vs coronary aneurysm	I259

Code to I259 the residual category for ischemic heart disease. MI and coronary aneurysm are both classified as "ischemic heart diseases."

f. When conditions involving different systems are qualified by "either… or…," and cannot be classified to the residual category for the disease, code R688, other specified general symptoms and signs.

I	(a)	Coma	R402
	(b)	? gallbladder colic ? coronary thrombosis	R688

Code I(b) R688, other ill-defined conditions. (Consider the two question marks on a single line as "either…or…")

g. When diseases and injuries are qualified by "either… or…," code R99, other unknown and unspecified cause, provided this is the only entry on the certificate. When other classifiable entries are reported, omit R99.

I	(a)	Head injury or CVA	R99

Code I(a) R99, other unknown and unspecified cause.

h. For doubtful diagnosis in reference to "either… or…" **accidents**, **suicides**, and **homicides**, refer to Section V, Part A, External Cause Code (E-code) Concept.

E. Conditions specified as "healed" or "history of"

The Classification provides sequela categories for certain conditions qualified as "healed." or "history of." Refer to Sequela, Section IV, Part F. When the Classification does not provide a code or a sequela category for a condition qualified as "healed" or "history of," code the condition as though not qualified by this term.

I	(a)	Myocardial infarction	I219
	(b)		
	(c)		
II		Gastritis, healed	K297

Code K297, gastritis NOS in Part II.

F. Coding entries such as "same," " ditto (")," "as above"

When the certifier enters "same," ditto mark (")," "as above," etc., in a "due to" position to a specified condition, do not enter a code for that line.

I	(a)	Coronary occlusion	I219
	(b)	Same	
	(c)	Hypertension	I10

Do not enter a code on I(b) for the entry "same."

I	(a)	Pneumonia	J189
	(b)	"	
	(c)	Emphysema	J439

Do not enter a code on I(b) for the " ditto mark (")."

G. Condition qualified by "rule out," "ruled out," "r/o"

When a conditions is qualified by "rule out," "ruled out," or "r/o," etc., **do not** enter a code for the condition.

H. Nonindexed and illegible entries

1. Terms that are not indexed

When a term is reported that does not appear in the ICD-10 Index, refer the term to the supervisor.

2. Illegible entries

When an illegible entry is the **only** entry on the certificate, code R99. When an illegible entry is reported with other classifiable entries, disregard the illegible entry and code the remaining entries as indexed.

I. Coding one-character reject codes

When a death record qualifies for more that one reject code, code only one in this order: 1, 2, 3, 4, 5, 9.

1. Reject code 1-5-Inconsistent duration

When a duration of an entity in a "due to" position is shorter than that of an entity reported on a line above it and only **one** codable entity is reported on each of these l ines, enter a reject code (1-5) in the appropriate data position. When more than one codable entity is reported on the same line, disregard the duration entered on that line. Use the appropriate reject code even though there are lines without a duration or with more than one codable entity between the entities with the inconsistent duration; in such cases, consider the inconsistency to be between the line immediately above and the line with the shorter duration.

If the inconsistent duration is between:

Lines	Enter Reject Code
I (a) and I (b)……	1
I (b) and I (c)……	2
I (c) and I (d)……	3
I (d) and I (e) ……...	4
Inconsistent durations between more than two lines in Part I, or any situation where reject codes 1-4 would not be applicable ……	5

Do not enter a reject code if the only inconsistency is between the durations of malignant neoplasms classifiable to C00-C96.

I	(a) ASHD	10 yrs.	I251	
	(b) Chronic nephritis and hypertension	5 yrs.	N039	I10
	(c) Diabetes	5 yrs.	E149	
			Reject 2	

Disregard the duration on I(b), since more than one codable entity is reported on this line. Only **one** codable entity is reported on lines I(a) and I(c) and the duration of the diabetes was shorter than that of ASHD. For the purposes of assigning the reject code, consider the duration on I(b) to be at least as long as the duration on I(a). Therefore, enter reject code 2 denoting an inconsistency between I(b) and I(c).

I	(a) ASHD	5 yrs	I251	
	(b) Chronic nephritis and hypertension	10 yrs	N039	I10
	(c) Diabetes	5 yrs	E149	

Do not enter reject code 2. The duration on I(b) is disregarded. The duration of diabetes on I(c) was not shorter that that of ASHD on I(a).

I	(a) Cardiac arrest		I469
	(b) Congestive heart failure	1 week	I500
	(c) Cancer of stomach	1 year	C169
	(d) Metastatic cancer of lung	6 months	C780

Do not use reject code 3 since the inconsistent duration is between malignant neoplasms.

I	(a) Basilar artery thrombosis	7 weeks	I630
	(b) Renal failure	4 weeks	N19
	(c) Pneumonia	1 week	J189

Reject 5

Enter reject code 5 since the inconsistent durations are between more than 2 lines.

Age 1 yr.

I	(a) Congenital nephrosis	life	N049
	(b)		
	(c) Intestinal hemorrhage	1 day	K922

Reject 5

Enter reject code 5 since reject codes 1-4 are not applicable.

2. Reject code 9 – More than four "due to" statements

When certifier's entries or reformatting result in more than **four** statements of "due to," continue the remaining codes horizontally on the **fifth** line and enter reject **code 9** in the appropriate position.

I	(a)	Terminal pneumonia	J189
	(b)	Congestive heart failure	I500
	(c)	Myocardial infarction	I219
	(d)	ASHD	I251
	(e)	Generalized arteriosclerosis	I709 E039
	(f)	Myxedema	
			Reject 9

Enter the code for the myxedema reported on the fifth "due to" line, I(f), following the code for the condition reported on this line (generalized arteriosclerosis). Enter reject code 9 in the appropriate data position.

If there are more than four "due to" statements in Part I and there is no codable condition reported on one or more lines, consider the condition(s) on each subsequent "due to" line as though reported on the preceding line. Enter reject code 9 only if, after reformatting, there are codable conditions on more than five lines.

I	(a)	Pneumonia	J182
	(b)	Bedfast	G839
	(c)	Paralysis following CVA	I64
	(d)	Hypertension due to	I10
	(e)	adrenal adenoma	D350

Do not enter reject code 9. Since bedfast is not a codable condition, enter the code for paralysis on I(b), the code for CVA on I(c), etc. As a result of the rearrangement of the conditions, there are codable conditions on only five lines.

When a death record qualifies for more that one reject, prefer a reject code for inconsistent durations over reject code 9.

J. Inclusion of additional information (AI) to mortality source documents

Code supplemental information when it modifies or supplements data on the original mortality source document.

1. When additional information (AI) **states** the underlying cause of a **specified disease in Part I**, code the additional information (AI) in a "due to" position to the specified disease.

I	(a)	Pulmonary edema	J81
	(b)	Congestive heart failure	I500
	(c)	Arteriosclerosis	I251
	(d)		I709
II			
	AI	the underlying cause of the congestive heart failure was ASHD.	

Since the certifier **states** the underlying cause of the congestive heart failure is ASHD, code I251 on I(c) and move the condition on I(c) to the next "due to" position.

2. When additional information (AI) **modifies** a disease condition, use the AI and code the disease modified by the AI in the position **first** indicated by the certifier.

I	(a)	Pneumonia	J181
	(b)		
	(c)		
	AI	Lobar pneumonia	

Code lobar pneumonia as the **specified** type of pneumonia on I(a) only.

3. When there is a stated or implied complication of surgery and the additional information indicates the condition for which surgery was performed, code this condition in a "due to" position to the surgery when reported in Part I and following the surgery when reported in Part II. Precede this code with an ampersand (&).

I	(a)	Coronary occlusion	T818
	(b)	Gastrectomy	&Y836
	(c)		&K259
	AI	Gastrectomy done for gastric ulcer.	

Code the condition necessitating the surgery on I(c) and precede this code with an ampersand.

I	(a) Respiratory arrest	R092			
	(b) Septicemia	T814			
	(c)				
II	Uremia, cholecystectomy	N19	&Y836	&K802	
	AI Surgery for gallstones				

Code the condition necessitating the surgery following the E-code for surgery in Part II.

4. When additional information (AI) **states** a certain condition is the **underlying cause** of death, **code** this condition in Part I in a "due to" position (on a separate line) to the conditions reported on the original death record.

I	(a) Cardiac arrest	I469
	(b) MI	I219
	(c) ASHD	I251
	(d)	E149
II		
	AI U.C. was diabetes	

Accept the certifier's statement that the underlying cause of death was "diabetes," and code this condition on I(d) in a "due to" position to the conditions originally reported in Part I.

5. When any morphological type of neoplasm is reported in Part I with no mention of a "site" and additional information specify a site, **code** the specified site **only** on the line where the morphological type is reported.

I	(a) Cancer	C349
	(b)	
	(c)	
II		
	AI Cancer of lung	

Code only the specified cancer (lung) on I(a).

6. When additional information states the primary site of a malignant neoplasm, code this condition in a "due to" position to the other malignant neoplasms reported in Part I.

I	(a)	Metastatic neoplasm	C80
	(b)	Metastasis to liver	C787
	(c)		C189
II			
	AI	Colon was primary site.	

Code the stated primary site on I(c) in a "due to" position to the other neoplasms reported in Part I.

I	(a)	Carcinomatosis	C80
	(b)		C61
	(c)		
II			
	AI	Prostate was probably the primary site.	

Code the presumptive primary site (prostate) on I(b) in a "due to" position to the stated neoplasm reported on the original death certificate.

7. When the additional information **does not modify** a condition on the certificate, or **does not state** that this condition is the underlying cause, code the AI as the last condition(s) in Part II. Code AI reported on the certificate beginning with the uppermost downward and from left to right.

I	(a)	Coronary thrombosis	I219
	(b)	HASCVD	I119
	(c)		
II		Hypertension	I10 I709 I64 I252
	AI	Arteriosclerosis, CVA, old MI	

The additional information does not modify conditions on the certificate. Code as the last entries in Part II.

Male, 30 minutes-Twin B

	I (a)	Immature	P073
600 gm	(b)		
	(c)		
	II	Atelectasis	P281 P015 P070

Code the additional information in the order reported, uppermost downward and from left to right.

K. Amended certificates

When an "amended certificate" is submitted, **code** the conditions reported on the amended certificate only.

L. Effect of age of decedent on classification

Always note the **age of the decedent** at the time the causes of death are being coded. Certain groups of categories are provided for certain age groups. There are several conditions within certain categories which cannot be properly classified unless the **age** is taken into consideration. Use the following terms to identify certain age groups:

1. NEWBORN OR NEONATAL means **less than 28 days** of age at the time of death. Code any index term with the indention of "newborn," "neonatal," "perinatal," "perinatal period," "fetus or newborn," or "fetal" (in this priority order) to the newborn category if the decedent is less than 28 days of age or there is evidence the condition originated in the first 27 days of life, even though death may have occurred later.

   Female, 4 hours

I (a)	Anoxia	P219
(b)	Cerebral hemorrhage	P524

   Since the age of decedent is less than 28 days, code anoxia of newborn, and cerebral hemorrhage of newborn.

   Male, 31 days

		Duration	
I (a)	Pulmonary hemorrhage	26 days	P269
(b)			

   Since the condition originated in the first 27 days of life, code as a newborn.

2. INFANT or INFANTILE means **less than 1 year** of age at the time of death even though death may have occurred later.

   Male, 9 months

I (a)	Pneumonia	J189
(b)	Hemiplegia	G802

   Since the decedent is less than 1 year of age at the time of death, code hemiplegia, infantile.

3. CHILD or CHILDHOOD means **less than 18 years of age** at the time of death even though death may have occurred later.

   Male, 11 years
   I (a) Asthma J450

   Code as asthma, childhood.

4. Congenital anomalies (Q00-Q99)

   Regard the conditions listed below as congenital and code to the appropriate congenital category if death occurred within the age limitations stated, provided there is no indication that they were acquired after birth.

   a. Less than 28 days:

      heart disease NOS
      hydrocephalus NOS

      Male, 27 days
      I (a) Renal failure N19
      (b) Hydrocephalus Q039

      Code the hydrocephalus as congenital since the decedent was less than 28 days of age at the time of death.

   b. Less than 1 year:

      aneurysm (aorta) (aortic) (brain) (cerebral) (circle of Willis) (coronary) (peripheral) (racemose) (retina) (venous)
      aortic stenosis
      atresia
      atrophy of brain
      cyst of brain
      deformity
      displacement of organ
      ectopia of organ
      hypoplasia of organ
      pulmonary stenosis
      valvular heart disease (any valve)

      Female, 3 months
      I (a) Pneumonia J189
      (b) Cyst of brain Q046

      Code cyst of brain as congenital since the age of the decedent is less than 1 year.

5. Congenital syphilis

Regard syphilis and conditions that are qualified as syphilitic as congenital and code to the appropriate congenital syphilis category if the decedent was less than two years of age.

Male, 16 mos

I	(a)	Syphilitic pneumonia	A500
	(b)		
	(c)		

Code **congenital** syphilitic pneumonia since age is less than 2 years.

6. Age limitation

Some categories in ICD-10 are limited by provisions of the Classification to certain ages. Code the categories listed below only if the age at the time of death was as follows:

a. Age 28 days or over

A32	E14	I62	L530
A35	E162	J12	M34
A40	E20	J13	N390
A41	E561	J14	N61
A56	E63	J15	R00
A74	E834	J16	R01
B30	E835	J18	R048
B370	F10	J43	R090
B371	F11	J80	R092
B372	F12	J849	R11
B373	F13	J96	R17
B374	F14	J981	R230
B375	F15	J982	R233
B376	F16	J984	R290
B377	F17	J988	R40
B378	F18	K27	R50
B379	F19	K56	R53
D65	G473	K631	R56
D751	G700	K65	R58
E05	I48	K92	R60
E10	I49	L01	R633
E11	I50	L10	R680
E12	I61	L26	R681
E13		L50	

Male, age 25 days
I (a) Urinary tract infection P393
(b)

Code urinary tract infection, newborn since age is less than 28 days.

Female, age 27 days

I	(a)	Respiratory failure	P285
	(b)		
	(c)		

Code respiratory failure, newborn since age is less than 28 days.

Female, age 28 days

I	(a)	Atelectasis	J981
	(b)		
	(c)		

Code atelectasis, J981 since age is reported as 28 days.

b. Age under 1 year:

R95

c. Age 1 year or over:

R960

Age 1 year

I	(a)	Sudden infant death syndrome	R960

d. Age 5 years or over:

X60-X84

Age 4 years

Place	I	(a)	GSW to head Suicide	S019 &W34
9				

M. Sex limitations

Certain categories in ICD-10 are limited to one sex:

For Males Only	**For Females Only**
B260	A34
C60-C63	B373
D074-D076	C51-C58
D176	C796
D29.-	D06.-
D40.-	D070-D073
E29.-	D25-D28
F524	D39.-
I861	E28.-
L291	E894
N40-N51	F525
Q53-Q55	F53.-
Q98	I863
R86	L292
S312-S313	L705
	M800-M801
	M810-M811
	M830
	N70-N98
	N992-N993
	O00-O99
	P546
	Q50-Q52
	Q96
	Q97
	R87
	S314
	S374-S376
	T19.2-T19.3
	T394
	T385
	T833
	Y424
	Y425
	Y76.-

If the cause of death is inconsistent with the sex, code the cause of death to R99, other ill-defined and unspecified causes of mortality (R99).

Female, age 32

I	(a)	Cancer of prostate	R99
	(b)		
	(c)		

Code other ill-defined and unspecified causes of mortality (R99).

N. Effect of duration on assignment of codes

Before assigning codes, take into account any statements entered on the certificate in the spaces for duration since these statements may affect the code assignments for certain conditions.

1. Qualifying conditions as acute or chronic

a. Usually the duration should **not** be used to qualify the condition as "acute" or "chronic."

			Duration	
I	(a)	Nephritis	2 years	N059

Code nephritis as indexed. Do not use the duration to qualify the nephritis as chronic.

b. However, when assigning codes to certain conditions classified as "ischemic heart diseases" the Classification provides the following specific guidelines for classifying a condition with a **stated** duration as acute or chronic:

- acute or with stated duration of 4 weeks or less
- chronic or with a stated duration of over 4 weeks

			Duration	
I	(a)	Acute myocardial infarction	3 mos.	I258
	(b)			
	(c)			

Code infarction, myocardium, acute, with a stated duration of over 4 weeks, I258.

(1) For the purpose of interpreting these instructions:

Consider these terms:	To mean:
brief days hours immediate instant minutes recent short sudden weeks (few) (several)	4 weeks or less or acute
longstanding 1 month	over 4 weeks or chronic

		Duration	
I	(a) Aneurysm heart	weeks	I219
	(b)		
	(c)		

Code aneurysm, heart, with a stated duration of 4 weeks or less, I219. "Weeks" is interpreted to mean 4 weeks or less.

c. When the duration is stated to be "acute" or "chronic," consider the condition to be specified as acute or chronic.

		Duration	
I	(a) Heart failure	1 hour	I509
	(b) Bronchitis	acute	J209

Code "acute" bronchitis on I(b).

2. Subacute

In general, code a disease that is specified as subacute as though qualified as acute if there is provision in the Classification for coding the acute form of the disease but **not** for the subacute form.

I (a) Subacute pyelonephritis N10

Code subacute pyelonephritis to N10, acute pyelonephritis since there is no code for subacute pyelonephritis.

3. Acute exacerbation

Code "acute exacerbation" of a chronic specified disease to the acute and chronic stage of the disease if the Classification provides separate codes for "acute" and "chronic."

I	(a)	Acute exacerbation of leukemia	C950	
	(b)	Chronic lymphocytic leukemia	C911	
	(c)			
I	(a)	Acute exacerbation of chronic	C910	C911
	(b)	lymphocytic leukemia		
I	(a)	Acute exacerbation of bronchitis	J209	
	(b)			
	(c)			
I	(a)	Acute exacerbation of chronic	N10	N119
	(b)	pyelonephritis		
I	(a)	Acute exacerbation of chronic	J209	J42
	(b)	bronchitis		
	(c)			
I	(a)	Chronic leukemia with conversion to acute phase	C951	C950
I	(a)	Acute exacerbation of chronic obstructive lung disease	J441	J449

Code the preceding examples to the acute and chronic stages of each specified disease since the Classification provides separate codes for the "acute" and "chronic."

4. Acute and chronic

Sometimes the terms acute and chronic are reported preceding two or more diseases. In these cases, use the term ("acute" or "chronic") with the condition it **immediately** precedes.

I	(a)	Chronic renal and liver failure	N189	K7290

Code renal failure, chronic and liver failure NOS.

5. Qualifying conditions as congenital or acquired

Code conditions classified as congenital in the Classification as congenital, even when not specified as congenital if the interval between onset and death and the age of the decedent indicate that the condition existed from birth.

Female, age 2 years		Duration	
I (a)	Pneumonia	1 week	J189
(b)	Heart disease	2 years	Q249

Code the condition on I(b) as congenital since the age of the decedent and the duration of the condition indicate that the heart disease existed at birth.

Do not use the interval between onset and death to qualify conditions that are classified to categories Q00-Q99, congenital anomalies, as acquired.

Male, 62 years		Duration	
I (a)	Renal failure	3 months	N19
(b)	Pulmonary stenosis	5 years	Q256

Do not use the duration to qualify the pulmonary stenosis as acquired.

6. Two conditions with one duration

When two or more conditions are entered on the same line with one duration, disregard the duration and code the conditions as indexed.

		Duration		
I (a)	Myocardial ischemia and congestive heart failure	3 weeks	I259	I500
(b)	Hypertension	5 years	I10	

Disregard the duration on I(a) and code the myocardial ischemia as indexed.

I (a)	MI due to nephritis	3 months	I219
(b)	Arteriosclerosis		N059
(c)			I709

Disregard the duration on I(a) and code myocardial infarction as indexed

7. Conflict in durations

When conflicting durations are entered for a condition, give preference to the duration entered in the space for interval between onset and death.

		Duration		
I (a)	Ischemic heart disease	2 weeks	years	I259

Use the duration in the block to qualify the ischemic heart disease.

8. Span of dates

Interpret dates that are entered in the spaces for interval between onset and death separated by a slash (/), dash (-), etc., as meaning from the first date to the second date. Disregard such dates if they extend from one line to another and there is a condition reported on both of these lines since the span of dates could apply to either condition.

Date of death 10-6-98		Duration	
I (a)	MI	10/1/98-	I219
(b)	Ischemic heart disease	10/6/98	I259

Disregard duration and code each condition as indexed since the dates extend from (a) to (b).

Date of death 10-6-98		Duration	
I (a)	Aneurysm of heart	10/1/98 – 10/6/98	I219
(b)			

Since there is only one condition reported, apply the duration to this condition.

Date of death 10-6-98		Duration	
I (a)	Ischemic heart disease	10/1/98 – 10/6/98	I249
(b)	Arteriosclerosis		I709

Apply the duration to I(a).

O. Relating and modifying conditions

1. Implied site of disease

Conditions that usually are classified in the ICD-10 according to the site affected, e.g., atrophy, calcification, calculus, congestion, degeneration, dilatation, edema, embolism, enlargement, failure, fibrosis, gangrene, hypertrophy, insufficiency, necrosis, obstruction, perforation, rupture, stenosis, stones, and stricture are sometimes reported without specification of site. Relate conditions such as these for which the Classification does not provide a NOS code and conditions that are almost always reported of specified sites for which the Classification classifies by site.

a. Usually it may be assumed that such a condition was of the same site as that of another reported condition if the Classification provides for coding the condition of unspecified site to the site of the other condition. The following generalizations usually apply.

(1) If the conditions are reported on the same line, with or without a connecting term that implies a due to relationship, assume the condition of unspecified site was of the same site as the condition of specified site. If conditions of different sites are reported on the same line with the condition of unspecified site, assume the condition of unspecified site was of the same site as the condition immediately preceding it. These coding principles apply whether or not there are other conditions reported on other lines in Part I.

I	(a)	Congestive heart failure	I500	
	(b)	Infarction with myocardial	I219	I515
	(c)	degeneration		
	(d)	Coronary sclerosis	I251	

Code the infarction as myocardial, site of the disease reported on the same line.

I	(a)	Aspiration pneumonia	J690	
	(b)	Cerebrovascular accident due to	I64	
	(c)	thrombosis	I633	

Code the thrombosis as cerebral, the site of the condition reported on the same line.

I	(a)	ASHD, infarction, CVA	I251	I219	I64
	(b)				
	(c)				

Code infarction, heart (I219). Relate the infarction to the ASHD.

I (a) Duodenal ulcer with internal hemorrhage K269 K922

Code hemorrhage, duodenal (K922). Relate the internal hemorrhage to the site.

I (a) CVA with hemorrhage I64 I619
(b) MI I219

Code hemorrhage, cerebral (I619). Relate the hemorrhage to the site of the condition reported on the same line.

(2) When the condition of unspecified site is reported on a separate line:

(a) If there is only one condition of a specified site reported either on the line above or below it, code to this site.

I (a) Massive hemorrhage K922
(b) Gastric ulceration K259

Code the hemorrhage as gastric.

I (a) Uremia N19
(b) Chronic prostatitis N411
(c) Benign hypertrophy N40

Code the hypertrophy as prostatic.

I (a) Internal hemorrhage K868
(b) Pancreatitis K85

Code hemorrhage, pancreas (K868).

(b) If there are conditions of different specified sites on the lines above and below it **and** the Classification provides for coding the condition of unspecified site to only one of these sites, code to that site.

I (a) Intestinal fistula K632
(b) Obstruction K566
(c) Carcinoma of peritoneum C482

Code the obstruction as intestinal since the Classification does not provide for coding obstruction of the peritoneum.

(c) If there are conditions of different specified sites on the lines above and below it **and** the Classification provides for coding the condition of unspecified site to both of these sites, code the condition unspecified as to site.

I	(a) CVA	I64	
	(b) Thrombosis	I829	
	(c) ASHD	I251	

Code thrombosis NOS on I(b).

(3) Do not relate conditions which are not reported in the first position on a line to the line above. It is acceptable to relate conditions not reported as the first condition on a line to the line below.

I	(a) Kidney failure	N19	
	(b) Vascular insufficiency c thrombosis	I99	I219
	(c) ASHD	I251	

Code thrombosis, heart (I219). Relate thrombosis to line below.

(4) When relating conditions to sites start at the top of the certificate and work down.

I	(a) Hemorrhage	R5800
	(b) Necrosis	K550
	(c) Diverticulitis	K579

Code necrosis, intestine (K550). Relate necrosis to the site the Classification assumed for diverticulitis. Hemorrhage cannot be related.

(5) Relate a condition of unspecified site to the complete term of a multiple site entity. If it is not indexed together, relate the condition to the site of the complete indexed term.

I	(a) Cardiorespiratory arrest c failure	I469	R092

Code failure, cardiorespiratory (R092). Relate failure to the complete term.

I	(a) Cardiorespiratory arrest c insufficiency	I469	I509

Code insufficiency, heart since cardiorespiratory arrest is indexed to heart. Relate insufficiency to the site of the complete term.

b. The preceding generalizations do not apply when:

(1) A malignant neoplasm without specification of site is reported with conditions such as perforation and obstruction of a specific organ.

I	(a) Perforation esophagus	K223	
	(b) Cancer	C80	
	(c)		

Code cancer NOS (C80).

(2) Arteriosclerosis, hypertension, or paralysis is reported with another condition.

I	(a) Arteriosclerosis with CVA	I709	I64
	(b)		
	(c)		

Code arteriosclerosis NOS (I709).

(3) Edema NOS is reported with a disease of the circulatory system (I00-I99) or kidney.

I	(a) Acute pulmonary congestion c̄ edema	J182	R609
	(b) Congestive heart failure	I500	
	(c) Hypertension, cardiovascular disease	I10	I516

Code edema NOS since it is reported with a disease of the circulatory system.

(4) Calculus NOS or stones NOS is reported with pyelonephritis. (In such cases, code the calculus or stones to N209).

I	(a) Pyelonephritis with calculus	N12	N209
	(b)		
	(c)		

Code calculus (N209) since it is reported with pyelonephritis.

(5) Infection NOS is reported with another condition. (Refer to Section III, #3)

I	(a)	Pneumonia	J189
	(b)	Infection	
	(c)		

Code pneumonia (J189) on I(a). Do not enter a code on I(b).

(6) When ulcer, site unspecified or peptic ulcer NOS is reported causing, due to or on the same line with gastrointestinal hemorrhage, code peptic ulcer NOS (K279).

I	(a)	G.I. hemorrhage	K922
	(b)	Peptic ulcer	K279
	(c)		

Code peptic ulcer (K279). Do not relate to G.I.

I	(a)	Ulcer causing G.I. hemorrhage	K922
	(b)		K279

Code ulcer to peptic ulcer (K279).

(7) When hernia (K40-K46) is reported with disease(s) of unspecified site(s), relate the disease of unspecified site to the intestine.

I	(a)	Hernia with hemorrhage	K469	K922

Code hemorrhage, intestine.

(8) When arthritis is reported with contracture, code contracture of the site. If no site is stated or if site is not indexed, code contracture, joint.

I	(a)	CVA	I64
	(b)	Phlebitis	I809
	(c)	Contractures	M245
	(d)	Osteoarthritis lower limbs	M199

Code contracture, joint (M245) since contracture lower limb is not indexed.

(9) When arthritis is reported with deformity, code deformity acquired of the site. If no site is stated or if site is not indexed, code deformity, joint.

I	(a)	Pulmonary embolism	I269
	(b)	Pathological fracture	M844
	(c)	Multiple deformities	M219
	(d)	Arthritis in both hips	M139

Code deformity (acquired) of hip.

(10) Hemorrhage NOS is reported as **causing** a condition of a specified site. (Relate hemorrhage to site of disease reported on same line or on line below only).

I	(a)	Respiratory failure	J969
	(b)	Hemorrhage	R5800

Code hemorrhage NOS. Do not relate to respiratory.

I	(a)	Respiratory failure	J969
	(b)	Hemorrhage	K922
	(c)	Gastric ulcer	K259

Relate hemorrhage on I(b) to gastric on I(c) and code gastric hemorrhage.

(11) Do not relate conditions which are classifiable to R00-R99, the symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (Chapter XVIII) except edema R609, gangrene and necrosis R02, hemorrhage R5800, stricture and stenosis R688.

I	(a)	Pneumonia with gangrene	J189	J850

Code gangrene, lung.

I	(a)	Myocardial infarction with anoxia	I219	R090

Code anoxia as indexed. Do not relate to heart since anoxia is classified to Chapter XVIII.

(12) Do not relate a disease condition that, by the name of the disease, implies a disease of a specified site unless it is obviously an erroneous code. If not certain, refer to supervisor.

I (a) Cirrhosis, encephalopathy K746 G934

Do not relate encephalopathy to liver since the name of the disease implies a disease of a specific site, brain.

I (a) Pulmonary embolism I269
(b) Thrombophlebitis I809

Code thrombophlebitis (I809) as indexed. Do not relate thrombophlebitis since it is not usually reported of any site other than extremities.

I (a) Cerebral hemorrhage c herniation I619 G935

Relate herniation to brain (G935) since hernia NOS (K469) goes to a digestive system code and it seems illogical to have a brain disease paired with a digestive disease.

(13) Congenital Anomaly NOS

Do not apply the general instructions on relating and implied site of disease to "congenital anomaly NOS."

I (a) Cardiac arrest I469
(b) Congenital anomaly Q899

Code congenital anomaly NOS (Q899).

c. Embolism, Infarction, Occlusion, Thrombosis (I749, I99, I829)

(1) Code the condition of the site reported when:

Embolism, infarction, occlusion, thrombosis NOS is reported "from" a specified site.

I (a) Congestive heart failure I500
(b) Embolism from heart I219
(c) Arteriosclerosis I709

Code I(b) embolism of heart (I219).

(2) Code the condition to both sites reported when:

Embolism, infarction, occlusion, thrombosis of a site is reported "from" a specified site.

I	(a)	Pulmonary embolism from leg veins	I269
	(b)		I803
	(c)		

Code I(a) pulmonary embolism (I269) and I(b) leg veins embolism (I803).

d. Ulcer NOS (L984)

When ulcer NOS (L984) is reported causing, due to, or on the same line with diseases classifiable to K20-K22, K30-K31, and K65, code peptic ulcer, NOS (K279).

I	(a)	Peritonitis	K659
	(b)	Ulcer	K279

Code ulcer, peptic (K279).

2. Coding conditions classified to injuries as disease conditions

a. Consider "injury," "hematoma," "laceration," (or other condition that is usually but not always traumatic in origin) of a specified organ to be qualified as nontraumatic when it is reported due to or on the same line with a disease, provided there is no statement on the death certificate that indicates the condition was traumatic. If there is provision in the Classification for coding the condition that is considered to be qualified as nontraumatic as such, code accordingly. Otherwise, code to the category that has been provided for "Other" conditions of the organ (usually.8).

I	(a)	Laceration heart	I518
	(b)	Myocardial Infarction	I219
	(c)		

Consider laceration of heart as nontraumatic and code to other ill-defined heart diseases.

I	(a)	Subdural hematoma	I620
	(b)	CVA	I64
	(c)		

Code hematoma, subdural, nontraumatic (I620) as indexed.

I	(a)	Injury liver	K768	
	(b)	Viral hepatitis	B199	
	(c)			

Code injury, liver as nontraumatic (K768) other specified diseases of liver.

I	(a)	Cardiorespiratory failure	R092	
	(b)	Intracerebral hemorrhage	I619	
	(c)	Meningioma, subdural hematoma	D329	I620

Code subdural hematoma as nontraumatic since it is reported on the same line with a disease.

I	(a)	Liver failure	K7290	
	(b)	Cirrhosis with injury to liver	K746	K768
	(c)			

Code injury to liver as nontraumatic since it is reported on the same line with a disease.

I	(a)	Cerebral arteriosclerosis with	I672	I620
	(b)	subdural hematoma		

Code subdural hematoma as nontraumatic since it is reported on the same line with a disease.

b. Some conditions are indexed directly to a traumatic category but the Classification also provides a nontraumatic code. When these conditions are reported due to or with a disease and an external cause is reported on the record or the Manner of Death box is checked as Accident, Homicide, Suicide, Pending Investigation or could not be determined, code the condition as traumatic.

Place	I	(a) Subdural hematoma	S065	
9		(b) CVA	I64	
		(c)		
MOD	II		&W18	
1				

Accident	Fell while walking

Code the subdural hematoma as traumatic since the manner of death is accidental.

Place 0	I	(a) Cardiorespiratory arrest	I469	
		(b) Subdural hematoma	S065	
		(c) Arteriosclerosis	I709	
MOD 1	II	Advanced age	R54	&W18

Accident	Home	Fell in her room striking head

Code the subdural hematoma as traumatic since the manner of death is accidental.

Place 9	I	(a) Cerebral hematoma with	S068	I672
		(b) cerebral arteriosclerosis		
		(c)		
MOD 1	II		&X59	

Accident

Code the cerebral hematoma as traumatic since the manner of death is accidental.

c. Some conditions are indexed directly to a traumatic category, but the Classification also provides a nontraumatic code. When these conditions are reported and the Manner of Death is Natural, code condition as nontraumatic even if external information is reported. This instruction applies only to conditions with the term "nontraumatic" in the Index. It does not apply to conditions in Section III, Intent of Certifier.

	I	(a) Subdural hematoma	I620
		(b)	
MOD 7	II		

Natural

Code I(a) as nontraumatic since Manner of Death box states "Natural."

	I	(a) Subdural hematoma	I620	
		(b)		
		(c)		
MOD 7	II		W19	

Natural	Fell in hospital

Code I(a) as nontraumatic since Manner of Death box states "Natural."

Place	I	(a) Subdural hematoma	I620
2		(b) Open wound of head	S019
MOD	II	Fell in hospital	&W19
7		Natural	

Code I(a) as nontraumatic since Manner of Death box states " Natural."

In order to assign the most appropriate code for a given diagnostic entity, it may be necessary to take other recorded information and the order in which the information is reported into account. It is important to interpret this information properly so the meaning intended by the certifier is correctly conveyed. The objective is to code each diagnostic entity in accordance with the intent of the certifier without combining separate codable entities. The following instructions help to determine the intent of the certifier. Apply Intent of Certifier instructions to "See also" terms in the Index as well.

1. Charcot's Arthropathy (A521)

Code G98 (Arthropathy, neurogenic, neuropathic (Charcot's), nonsyphilitic):

When reported due to:

A30	Leprosy	G608	Hereditary sensory neuropathy
E10-E14	Diabetes mellitus	G901	Familial dysautonomia
E538	Subacute combined degeneration (of spinal cord)	G950	Syringomyelia
F101	Alcohol abuse	Q059	Spina bifida, meningo-myelocele
F102	Alcoholism	Y453	Indomethacin
G600	Hypertrophic interstitial neuropathy	Y453	Phenylbutazone
G600	Peroneal muscular atrophy	Y427	Corticosteroids

I	(a) Charcot's arthropathy	G98
	(b) Diabetes	E149

2. General Paresis (A521)

   a. Code G839 (Paralysis)

      When reported due to or on the same line with:

A022	A981-A982	B673	D210	I10
A040	A988	B676	D233-D234	I600-I709
A066	B003-B004	B679	D320-D339	I748
A078	B010-B011	B690	D352	J108
A170-A179	B020-B022	B719	D355	J118
A180	B03-B04	B75	D360-D367	M000-M1990
A190-A191	B050-B051	B832	D420-D439	M420-M429
A203	B060	B888	D443	M45-M519
A228	B200-B24	B89-B99	D446	M860-M949
A260-A289	B258	C470	D448	N000-N399
A321-A329	B259	C479	D45-D479	P000-Q079
A368	B261-B262	C700-C729	D487	Q750-Q799
A390-A394	B268	C751	D489	Q860-Q999
A398-A399	B270-B279	C754	E713	R270-R278
A428	B338	C758	E750-E756	R75
A440-A539	B375	C760	F449	
A544	B384	C770	G000-G239	
A548	B428	C793-C794	G300-G379	
A680-A689	B450-B459	C798-C97	G450-G459	
A692	B461	D170	G540-G729	
A800-A959	B49-B64	D180-D181	G839-G98	

   b. Code T144 (Paralysis, traumatic)
      Refer to Section V, Part S, Sequela of injuries, poisonings, and other consequences of external causes, if a sequela is indicated.

      When reported due to or on the same line with:

S000-T149	W81-X39
T20-T35	X50-X59
T66-T79	X70-X84
T90-T95	X91-Y09
T981-T982	Y20-Y369
V010-W43	Y850-Y872
W45-W77	Y890-Y899

I	(a) CVA with general paresis		I64	G839
	(b)			
	(c)			

I	(a) General paresis	T144
	(b) Brain injury	S069
	(c)	
II	Auto accident	&V499

3. Organisms and Infections NOS (B99)

In order to determine which instruction to use, refer to the Index under the named organism or under Infection, named organism.

a. Organisms and infections classified to A49 and B34

(1) When an infectious or inflammatory condition is reported and

(a) Is preceded by condition classified to A49 or B34 **or**

(b) A condition classifiable to A49 or B34 is reported as the only entry or first entry on the next lower line **or**

(c) Is followed by a condition classified to A49 or B34 separated by a connecting term not indicating a due to relationship

(i) If a single code is provided for the infectious or inflammatory condition modified by the condition classified to A49 or B34, use this code. Do not assign a separate code for the condition classifiable to A49 or B34. It may be necessary to use "due to" or "in" in the Index to assign the appropriate code.

I (a) E. coli diarrhea A044

Code as indexed under Diarrhea, due to, Escherichia coli.

I (a) Pneumonia J129
(b) Viral infection

Code as indexed under Pneumonia, viral.

I (a) Meningitis and sepsis G000 A413
(b) H. influenzae

Code as indexed under Meningitis, Haemophilus (influenzae) and Septicemia, Haemophilus influenzae.

I (a) Sepsis with staph A412

Code as staphylococcal sepsis as indexed under Septicemia, staphylococcal.

I (a) Pneumonia c̄ MRSA J152

Code as methicillin resistant staphylococcal aureus pneumonia as indexed under Pneumonia, MRSA.

(ii) If (i) does not apply, and the Index provides a code for the infectious or inflammatory condition qualified as "bacterial," "infectious," or "viral," assign the appropriate code based on the reported type of organism. Do not assign a separate code for the condition classified to A49 or B34.

I (a) Coxsackie virus pneumonia J128

Coxsackie virus is a specified virus. Code as indexed under Pneumonia, viral, specified NEC.

I (a) Peritonitis K650
(b) Campylobacter

Campylobacter is a specified bacteria. Code as indexed under Peritonitis, bacterial.

I (a) Pneumonia with coxsackie virus J128

Code as coxsackie virus pneumonia. Since coxsackie virus is a specified virus, code as indexed under Pneumonia, viral, specified NEC.

(iii) If (i) and (ii) do not apply, assign the NOS code for the infectious or inflammatory condition. Do not assign a separate code for the condition classified to A49 or B34.

I (a) Klebsiella urinary tract infection N390

The Index does not provide a code for Infection, urinary tract specified as bacterial, infectious, or Klebsiella. Therefore, code Infection, urinary tract.

I (a) Pyelonephritis N12
(b) Staphylococcus

The Index does not provide a code for pyelonephritis specified as bacterial, infectious, or staphylococcal. Therefore, code Pyelonephritis as indexed.

I (a) Pyelonephritis and pseudomonas N12

Code as pseudomonas pyelonephritis. The Index does not provide a code for pyelonephritis specified as bacterial, infectious or pseudomonas. Therefore, code Pyelonephritis as indexed.

b. Organisms and infections classified to categories other than A49 and B34

(1) When an infectious or inflammatory condition is reported and

(a) Is preceded by a condition classifiable to Chapter I other than A49 or B34

(i) Refer to the Index under the infectious or inflammatory condition. If a single code is provided for this condition, modified by the condition from Chapter I, use this code. It may be necessary to use "due to" or "in" in the Index to assign the appropriate code.

I (a) Cytomegaloviral pneumonia B250

Code as indexed under Pneumonia, cytomegaloviral.

(ii) If (i) does not apply, refer to Volume 1, Chapter I to determine if the Classification provides an appropriate fourth character. Indications of appropriate fourth characters for sites would be "of other sites," "other specified organs," or "other organ involvement."

I (a) Candidiasis peritonitis B378

Since this term is not indexed together, refer to Volume I, Chapter I and select the fourth character, .8, candidiasis of other sites.

(iii) If (i) and (ii) do not apply, code as two separate conditions.

I (a) Mononucleosis pharyngitis B279 J029

Since this term is not indexed together and Volume I, Chapter I does not provide an appropriate fourth character under B27.-, code as two separate conditions.

(b) A condition from Chapter I other than A49 or B34 is reported as the only entry or the first entry on the next lower line

(i) Code each condition as indexed where reported.

I (a) Peritonitis K659
(b) Candidiasis B379

Since candidiasis is classified to a condition other than A49 or B34, code each condition as indexed.

(c) A condition from Chapter I other than A49 or B34 is reported separated by a connecting term not indicating a due to relationship

(i) Code each condition as indexed where reported.

I (a) Pneumonia with candidiasis J189 B379

Since candidiasis is classified to a condition other than A49 or B34, code each condition as indexed.

c. Do not use HIV or AIDS to modify an infectious or inflammatory condition. Code as two separate conditions.

I (a) HIV pneumonia B24 J189

d. When an infectious or inflammatory condition is reported and a specified organism or specified nonsystemic infection is not the only entry or the first entry on the next lower line.

, Code the infectious or inflammatory condition and the organism or infection separately.

I (a) Pneumonia J189
(b) Emphysema & viral infection J439 B349

I (a) Peritonitis K659
(b) Gastric ulcer and staphylococcal infection K259 A490

e. When an infectious or inflammatory condition is reported and

(1) Infection NOS is reported as the only entry or the first entry on the next lower line

, Code the infectious or inflammatory condition where it is entered on the certificate and do not enter a code for infection NOS, but take into account if it modifies the infectious condition.

I (a) Cholecystitis & hepatitis K819 B159
(b) Infection

I (a) Meningitis G039
(b) Infection & brain tumor D432

(2) Infection NOS is not the only entry or the first entry on the next lower line

, Code the infectious or inflammatory condition where it is entered on the certificate and code infection NOS separately.

I	(a) Septicemia	A419	
	(b) Diabetes & infection	E149	B99

f. When a noninfectious or noninflammatory condition is reported and infection NOS is reported on a lower line

, Code the noninfectious or noninflammatory condition as indexed and code infection NOS (B99) where entered on the certificate.

I	(a) ASHD	I251	
	(b) Infection	B99	

g. When an organism is reported preceding two or more infectious conditions reported consecutively on the same line

, Code each of the infectious conditions modified by the organism.

I	(a) Staphylococcal pneumonia and	J152	G003
	(b) meningitis		

h. When any condition is reported and a generalized infection such as bacteremia, fungemia, sepsis, septicemia, systemic infection, or viremia is reported on a lower line

, Code both the condition and the generalized infection where entered on certificate. Do not modify the condition by the infection.

I	(a) Bronchopneumonia	J180
	(b) Septicemia	A419

I	(a) Pneumonia	J189
	(b) Viremia	B349

4. Erythremia (C940)

Code D751 (Secondary erythremia):

When reported due to:

I	(a) Septicemia	A419
	(b) Erythremia	D751
	(c) Polycythemia	D45

A000-D489	F55	L710-L719	N700-N768	R730-R739
D510-D619	G000-G419	L930-L932	N980	R75
D751	G450-G459	L950-L959	N990-Q999	R780
D760-E149	G600-G979	M000-M1990	R030	S000-Y899
E240-E279	I00-J989	M300-M359	R040-R049	
E65-E678	K20-L00	M420-M549	R090-R098	
E890	L100-L139	M800-M949	R160-R162	
E896-E899	L230-L309	M960-M969	R31	
F100-F199	L500-L599	N000-N399	R58-R5800	

5. Polycythemia (D45)

Excludes:
idiopathic
primary
rubra
vera

Code D751 (Secondary polycythemia):

When reported due to:

A000-D489	F55	L710-L719	N000-N399	R160-R162
D510-D619	G000-G419	L930-L932	N700-N768	R31
D751	G450-G459	L950-L959	N980	R58-R5800
D760-E149	G600-G979	M000-M1990	N990-Q999	R730-R739
E240-E279	I00-J989	M300-M359	R030	R75
E65-E678	K20-L00	M420-M549	R040-R049	R780
E890	L100-L139	M800-M949	R090-R098	S000-Y899
E896-E899	L230-L309	M960-M969		
F100-F199	L500-L599			

I	(a) Polycythemia	D751
	(b) Pneumonia	J189
I	(a) Polycythemia	&D751
	(b) Chloromycetin therapy	Y408
I	(a) Polycythemia vera	D45
	(b) Emphysema	J439

6. Hemolytic Anemia (D589)

Code D594 (Secondary hemolytic anemia):

When reported due to:

A000-D489	F100-F169	P550-P579
D594	F180-F199	Q200-Q289
D65-D699	G000-G09	R75
D760	I00-I519	R780
D800-D899	I776	R823
E201	J100-J22	S000-Y899
E280-E289	K700-K769	
E40-E46	M000-M359	
E700-E899	N000-N399	

I	(a)	Hemolytic anemia	D594
	(b)	Hairy cell leukemia	C914
	(c)		

I	(a)	Hemolytic anemia	D589
	(b)		
	(c)		
II	Hypogammaglobulinemia		D801

I	(a)	Secondary hemolytic	D594
	(b)	anemia	

7. Sideroblastic Anemia (D643)

a. Code D641 (Secondary sideroblastic anemia due to disease):

When reported due to:

A000-C97	E230	F180-F182	J069	M023
D45	E531	F190-F192	J65	M101
D461	E539	F55	K700-K703	M352
D471	E798	G030	K709	N143
D510-D599	E800-E802	G040	K721	N188-N19
D640-D643	E831	G361	K730-K746	N341
D648	E880	G933	K760	R162
D731	E890	I330	K761	R75
D748	F100-F102	I423	K766	R780
D758	F109-F112	I729	K769	R897
D860-D869	F119-F122	I888	K908	
D892	F130-F132	J00	L081	
E018-E02	F140-F142	J020	L448	
E032-E0390	F150-F152	J030	L946	
E050-E059	F160-F162	J040-J042	M021	

I	(a)	Pneumonia	J189
	(b)	Sideroblastic anemia	D641
	(c)	Alcoholic cirrhosis	K703

b. Code D642 (Secondary sideroblastic anemia due to drugs or toxins):

When reported due to:

D642
T560
X49
Y400-Y599
Y86
Y880

I	(a)	CHF	I500
	(b)	Sideroblastic anemia	&D642
	(c)	Chloramphenicol	Y402

8. Hemorrhagic Purpura NOS (D693)

Code D690 (Hemorrhagic purpura not due to thrombocytopenia):

When reported due to:

A000-C97	F119	I872	N200-N219	Q878
D45-D460	F120	I878	N250-N311	R104
D462-D469	F121-F122	I879-I889	N312-N319	R162
D471	F130-F132	I898-I899	N320-N390	R233
D510	F140	I99-J00	N392	R238
D511-D581	F141-F142	J020	N398-N399	R291
D582	F150	J030	N719	R31
D588-D618	F151-F152	J040-J042	N897	R398
D619	F160-F162	J069	N910-N939	R72
D648	F180-F181	J65	N948	R75
D65-D692	F182	K658	N950-N959	R780
D698-D71	F190-F191	K660	N991	R897
D720	F192	K700-K769	P070-P073	T360-T658
D721	G000-G032	K908	P219	T659
D728	G038-G039	L081	P221-P289	T780-T784
D729-D759	G040	L272	P546	T789
D860-D869	G042-G049	L448	Q458	T806
D892	G060	L573	Q680	T818
E240	G061-G09	L80-L819	Q740-Q741	T881
E241	G312	L946	Q758	T885
E242	G361	L958	Q772	T886-T887
E243	G373-G374	L959	Q775-Q776	T96-T97
E248	G540	M021-M023	Q778	T981
E249	G92	M050-M089	Q779-Q783	X20-X29
E301	G933	M101	Q785	X40-X48
E54	G958	M120	Q788-Q789	X49
E569	G961	M138	Q791	X60-X69
E642	I00-I019	M159	Q794-Q795	Y10-Y19
E648	I10	M300	Q796	Y400-Y599
E703	I308	M301-M352	Q798	Y86
E798	I330-I339	M358	Q808	Y870
E850-E859	I400-I409	M359	Q810-Q819	Y872
E871	I423	M898	Q820	
E880	I729	N000-N078	Q821-Q825	
F100	I749	N079	Q828	
F101-F102	I770	N10-N189	Q848	
F110-F112	I771-I779	N19	Q872-Q873	

I	(a) CVA	I64
	(b) Hemorrhagic purpura	D690
	(c) Leukemia	C959

9. Thrombocytopenia (D696)

Code D695 (Secondary thrombocytopenia):

When reported due to:

A000-D447	E755-E756	G361	L448	Q209
D448	E768-E779	G373-G374	L590	Q210
D449-D509	E782	G450-G452	L818	Q220-Q246
D510	E798	G454-G459	L946	Q248
D511-D691	E803	G540	M021	Q249
D692	E835	G903	M023	Q289
D693-D699	E871	G92	M050-M089	Q758
D730-D752	E880	G933	M101	Q775-Q776
D758	E888	G936	M120	Q778
D759-D763	E890	G938	M138	Q779-Q783
D814	E898	G951	M159	Q788-Q789
D820	F100	G958	M199-M1990	Q798
D821	F101-F102	G961	M219	Q828
D840	F110	I00-I019	M300	Q850
D841-D848	F111-F112	I10-I629	M301-M329	R001
D860-D892	F119	I630	M352	R008
E000-E009	F120	I631	M898	R012
E018-E02	F121-F122	I633-I677	N000-N078	R161-R162
E031-E033	F130	I678-I679	N079	R233
E034	F131-F132	I690-I891	N10-N219	R291
E035-E0390	F140	I898	N250-N311	R31
E055	F141-F142	I899-I972	N312-N319	R398
E059	F150	I978	N320-N390	R58-R5800
E071	F151-F152	I99	N392	R75
E230	F160	J00	N398-N399	R771
E349	F161-F162	J020	N980-N989	R780
E46	F180-F181	J030	N991	R788
E538	F182	J040-J042	P070-P073	R798
E539-E54	F190-F191	J069	P219	R825-R828
E560-E639	F192	J100-J118	P221-P289	R829
E642	F55	J65	P350-P399	R897
E648	G000-G032	K658	P550-P560	T200
E649	G038-G039	K660-K661	P570	T201-T289
E713	G040	K700-K769	P610	T300
E740	G042-G048	K908	P614	T301-T329
E750	G049-G060	K920-K921	Q204-Q205	T360-T658
E752	G061-G09	K922	Q206	T659
E753	G312	L081	Q208	T66-T670

T68	T886-T888	W94-X19	Y615	Y848-Y849
T752	T889	X20-X32	Y617	Y850-Y872
T780-T783	T950-T97	X34-X39	Y620-Y621	Y880-Y881
T784	T981	X40-X48	Y623	Y890-Y891
T788-T789	T983	X49-X59	Y625	Y899
T803-T804	V010-V99	X69-Y369	Y630-Y633	□
T808-T809	W00-W53	Y400-Y601	Y640-Y655	
T818	W54-W56	Y603	Y658	
T881	W57	Y605	Y66-Y831	
T882-T883	W58-W87	Y610-Y611	Y840	
T885	W88-W93	Y613	Y842	

I	(a)	Multiple hemorrhages	R5800
	(b)	Thrombocytopenia	D695
	(c)	Cancer lung	C349

10. Hyperparathyroidism (E213)

Code E211 (Secondary hyperparathyroidism):

When reported due to:

A180	D300-D309
A187	D351-D353
A188	D410-D419
B650-B839	D442-D444
B902-B908	E130-E139
C250-C259	E15-E215
C64-C689	E240-E259
C750-C752	E270-E279
C788	E892
C790-C791	M880-M889
C798	N000-N399
C900-C902	Q600-Q649
D017	Q770-Q789
D090-D091	Q798
D093	
D136-D137	

I	(a)	Hypercalcemia	E835
	(b)	Hyperparathyroidism	E211
	(c)	Cancer parathyroid gland	C750

11. Hyperaldosteronism (E269)

Code E261 (Secondary hyperaldosteronism)

When reported due to:

A220-A229	E250-E269	I10-I139	T880-T889
B500-B54	E270-E46	I500-I509	T96-T97
B560-B575	E511-E519	I701	T983
C740 C749	E660-E669	I778	X40-X49
C797	E713	K700-K709	X60-X69
D093	E86	K721-K7210	X85-X90
D350	E871	K730-K746	Y10-Y19
D441	E880	K85	Y400-Y599
D448-D449	E890	N000-N399	Y86-Y880
D840-D849	E892	T360-T659	□
E000-E249	E895-E899	T783	

I	(a) MI	I219
	(b) Hyperaldosteronism	E261
	(c) Renal artery stenosis	I701

12. Lactase Deficiency (E730)

Code E731 (Secondary lactase deficiency):

When reported due to:

E730-E749	K630
K500	K633
K508-K511	K639
K519-K529	K900-K902
K570	K912
K574	N200-N209
K580-K589	
K590-K599	

I	(a) Severe diarrhea	K529
	(b) Lactase deficiency	E731
	(c) Celiac disease	K900

Code I(b) secondary lactase deficiency to E731 since it is reported due to celiac disease.

13. Alcohol (F100, F101, F109, R780, R826, R893)

When reported anywhere on the certificate, code:

Alcohol (ethyl)(isopropyl)(methyl) (propanol)(propyl)(methanol)	F109
Alcohol ingestion	F109
Alcohol intoxication	F100
Alcohol overdose	F101
Alcohol overindulgence	F101
Blood alcohol (any %)	R780
Body fluid alcohol (any %)	R893
Drinking	F109
Intoxication (acute) NOS	F100
Urine alcohol (any %)	R826

NOTE: Do not use accident reported in Manner of Death box to code the above terms to nature of injury and external cause.

	I	(a) Alcohol intoxication	F100
		(b) Blood alcohol 3%	R780
MOD		(c)	
1	II	Excessive drinking	F100

Accident

Code each entry as indexed. Accident in Manner of Death box does not require a code and does not change the code assignment.

I	(a) G. I. hemorrhage	K922
	(b) Cirrhosis of liver	K746
II	Intoxicated	F100

Code each entry as indexed.

Exceptions:

(1) When alcohol poisoning or alcohol toxicity is reported anywhere on certificate, code the previous terms to nature of injury and external cause codes.

Place	I	(a) Excessive drinking	T519	&X45
9	II	Alcohol poisoning	T519	

Code I(a) nature of injury and external cause codes since alcohol poisoning is reported on the certificate. Code Part II to the nature of injury code only.

(2) When the previous terms and drug poisoning are reported on the same record, refer to Section V, Part Q, 4, Poisoning by alcohol and drugs to determine if there is evidence of synergistic effects of the alcohol and drugs.

Place						
9	I	(a)	Combined action of alcohol	T519	X45	T427 &X41
		(b)	intoxication and sedative overdose			
		(c)				

Interpret I(a) as poisoning and code nature of injury and external cause codes for alcohol and drugs. Precede the external cause code for the drug with an ampersand.

(3) When intoxication (acute) NOS is reported due to drugs or poisonous substances, refer to Section V, Part Q, 5, Intoxication (acute) NOS due to specified substances).

14. Korsakov's Disease, Psychosis, or Syndrome (F106)

Code F04 (Nonalcoholic Korsakov's disease, psychosis, or syndrome):

When reported due to :

A000-D591	M000-N459	S810-S829	T904
D592	N490-N809	S840-S899	T905
D593-D610	N990-N992	S910-S929	T908
D611	N994-Q999	S940-S999	T909
D612-E519	R54	T012-T029	T910
E52	R75	T041-T08	T911-T915
E530-F09	S010-S029	T091	T918
F200-G619	S040-S050	T093-T10	T919-T922
G620	S052-S099	T111	T924-T926
G622	S110-S129	T113-T12	T928
G628-G98	S140-S199	T131	T929-T932
I00-J989	S210-S229	T133-T139	T934-T936
K20- K291	S240-S299	T141-T142	T938
K293-K669	S310-S328	T144-T329	T939
K710-L109	S340-S399	T340-T349	T940-T953
L129-L449	S410-S429	T351-T399	T954
L510-L599	S440-S499	T410-T422	T958-T959
L710-L719	S510-S529	T425-T426	T96-X40
L88	S540-S599	T427	X43-X44
L920	S610-S628	T428	X46-Y449
L928-L932	S640-S699	T440-T509	Y451-Y468
L951	S710-S729	T520-T889	Y480-Y485
L980-L981	S740-S799	T901-T903	Y500-Y899

I	(a)	Korsakoff's psychosis	F04
	(b)	Wernicke's encephalopathy	E512
	(c)		

15. Drug Use NOS - Named Drug Use (F11-F16, F18-F19)

Code drug use NOS, F199, when reported anywhere on the certificate. Code use of named drug, F11-F16, F18-F19 with fourth character "9," when reported anywhere on the certificate and the named drug is listed in Volume 3, under Addiction/Dependence. If the named drug is not listed in Volume 3 under Addiction/Dependence, do not enter a code.

Exceptions:

(1) Complication(s) reported due to (named) drug use. Code the (named) drug use to the appropriate external cause code for adverse effects of drugs in therapeutic use unless the drug is one not used for medical care purposes. Refer to Section V, Part R, Drugs, medicaments, biological substances causing adverse effects in therapeutic use (Y40-Y59) for coding instructions.

(2) There is mention of drug poisoning anywhere on the certificate, code the (named) drug use to F11-F16, F18-F19, with fourth character "9," if listed in Volume 3 under Addiction/Dependence. If (named) drug is not indexed in Volume 3 under Addiction/Dependence, code F19, specified drug NEC with fourth character "9." Refer to Section V, Part Q, 2, Poisoning by drugs.

I	(a) Chronic alcoholism	F102
	(b)	
	(c)	
II	Drug use	F199

Code drug use to F199. There is no complication reported due to the drug use.

I	(a) Cancer of pancreas	C259
	(b)	
	(c)	
II	Methadone use	F119

Code methadone use to F119 as listed under Dependence in Volume 3. There is no complication reported due to the methadone use.

I	(a) Systemic lupus erythematosus	M329
	(b)	
	(c)	
II	Steroid use	

Do not code steroid use. Steroid is not listed in Volume 3 under Addiction/Dependence and no complication is reported due to the steroid use.

I	(a)	Diabetes	E139
	(b)	Steroid use	Y427
	(c)		
II		Rheumatoid arthritis	&M069

Code the diabetes as a complication of the steroids given in therapeutic use for rheumatoid arthritis. Refer to Section V, Part R, Drugs, medicaments, biological substances causing adverse effects in therapeutic use (Y40-Y59) for coding complications of drugs during therapeutic use.

I	(a)	Bacterial endocarditis	&I330
	(b)	Use of morphine	Y450
	(c)		

Code the bacterial endocarditis as a complication of the morphine given in therapeutic use. Precede the complication with an ampersand since the condition requiring the drug is not reported. Refer to Section V, Part R, Drugs, medicaments, biological substances causing adverse effects in therapeutic use (Y40-Y59) for coding complications of drugs during therapeutic use.

Place 9	I	(a)	Acute cocaine poisoning	T405	&X42
		(b)			
		(c)			
MOD 1	II		Cocaine use	F149	T405

Accident	Ingested cocaine

Code cocaine use to F149 as listed under Dependence in Volume 3 since reported on the certificate with drug poisoning. Refer to Section V, Part Q, 2, Poisoning by drugs for instructions in coding drug poisoning.

Place 9	I	(a)	Respiratory failure	J969	
		(b)	Acute drug use	F199	
		(c)			
MOD 1	II			&X42	T402

Accident	Overdose of morphine

Code acute drug use to F199 since reported on the certificate with drug poisoning.

Place				
9	I	(a)	Poisoning by drugs	T509 &X44
		(b)		
		(c)		
	II	Use of sedatives		F139

Code use of sedative to F139 as listed under Dependence in Volume 3 since reported on the certificate with drug poisoning.

16. Tobacco Use (F179)

Code F179 (Tobacco use):

When the certifier selects "Yes" or "Probably" in the tobacco box on the US Standard Certificate of Death.

Did tobacco use contribute to death?

Yes	☐	Probably	☐
No	☐	Unknown	☐

The F179 should follow the last code in Part II.

I	(a) Pneumonia	J189	
	(b) Lung cancer	C349	
II	COPD	J449	F179

Did tobacco use contribute to death?

Yes	☒	Probably	☐
No	☐	Unknown	☐

17. Psychotic Episode NOS (F239)

Code F068 (Psychotic episode, organic NEC):

When reported due to or on the same line with organic conditions classifiable to the following categories:

A000-G98	L928-L932	R068
H600-H709	L951	R090-R091
H720-H739	L980-L981	R291
I00-J989	M000-N459	R54
K20-L109	N490-N809	R600-R609
L120-L449	N990-N992	R75
L510-L599	N994-Q999	
L710-L719	R02	
L88	R042-R048	
L920	R060-R065	

I	(a)	TIA's with psychotic episodes	G459 F068
	(b)	Cerebral arteriosclerosis	I672
	(c)	Arteriosclerosis	I709

Code psychotic episode on I(a) to F068, since it is reported on the same line with TIA (G459). It could also be coded to F068 since it is reported due to cerebral arteriosclerosis (I672).

18. Psychosis (any F29)
Mental Disorder (any F99)

Code F09 (Psychosis, organic NEC):

When reported due to or on the same line with organic conditions classifiable to the following categories:

A000-G98	S040-S050	S910-S929	T909
I00-J989	S052-S099	S940-S999	T910
K20-L109	S110-S129	T012-T029	T911-T915
L120-L449	S140-S199	T041-T08	T918
L510-L599	S210-S229	T091	T919-T922
L710-L719	S240-S299	T093-T10	T924-T926
L88	S310-S328	T111	T928
L920	S340-S399	T113-T12	T929-T932
L928-L932	S410-S429	T131	T934-T936
L951	S440-S499	T133-T139	T938
L980-L981	S510-S529	T141-T142	T939
M000-N459	S540-S599	T144-T329	T940-T953
N490-N809	S610-S628	T340-T349	T954
N990-N992	S640-S699	T351-T889	T958-T959
N994-Q999	S710-S729	T901-T903	T96-Y899
R54	S740-S799	T904	
R75	S810-S829	T905	
S010-S029	S840-S899	T908	

I	(a) Pneumonia	J189		
	(b) Psychosis – cerebrovascular arteriosclerosis	F09	I672	
	(c) Arteriosclerosis	I709		
I	(a) Cardiorespiratory arrest	I469		
	(b) Heart failure	I509		
	(c) Multiple sclerosis and mental disorder	G35	F09	

19. Dissociative Disorder (F449)

Code F065 (Organic dissociative disorder):

When reported due to organic conditions classifiable to the following categories:

A000-G98	L951	R291
H600-H709	L980-L981	R54
H720-H739	M000-N459	R600-R609
I00-J989	N490-N809	R75
K20-L109	N990-N992	S000-Y899
L120-L449	N994-Q999	
L510-L599	R02	
L710-L719	R042-R048	
L88	R060-R065	
L920	R068	
L928-L932	R090-R091	

I (a)	Dissociative disorder	F065
(b)	Chronic subdural hematoma	T905
(c)	Car accident	&Y850

Code I(a) organic dissociative disorder to F065 since reported due to an injury.

I (a)	Dissociative disorder	F065
(b)	Senility	R54

Code I(a) organic dissociative disorder to F065 since reported due to senility.

20. Personality Disorder (F609)
Personality Change (Enduring) (F629)

Code F070 (Organic personality disorder):

When reported due to organic conditions classifiable to the following categories:

A000-G98	R54	S540-S599	T113-T12
I00-J989	R75	S610-S628	T131
K20-L109	S010-S029	S640-S699	T133-T139
L120-L449	S040-S050	S710-S729	T141-T142
L510-L599	S052-S099	S740-S799	T144-T329
L710-L719	S110-S129	S810-S829	T340-T349
L88	S140-S199	S840-S899	T351-T889
L920	S210-S229	S910-S929	T901-T922
L928-L932	S240-S299	S940-S999	T924-T932
L951	S310-S328	T012-T029	T934-Y899
L980-L981	S340-S399	T041-T08	
M000-N459	S410-S429	T091	
N490-N809	S440-S499	T093-T10	
N990-Q999	S510-S529	T111	

Place				
9	I	(a)	Personality disorder	F070
		(b)	Head injury	S099
		(c)	Assault	&Y09

Code I(a) organic personality disorder to F070 since reported due to a head injury.

I	(a)	Personality disorder	F070
	(b)	Meningioma brain	D320

Code I(a) organic personality disorder to F070 since reported due to a meningioma brain.

I	(a)	Personality change	F070
	(b)	Jakob-Creutzfeldt Syndrome	A810

Code I(a) organic personality disorder to F070 since reported due to Jakob-Creutzfeldt Syndrome.

21. Parkinson's Disease (G20)

Code G219 (Secondary parkinsonism):

When reported due to:

A170-A179	B902
A504-A539	B91
A810-A819	B941
A830-A89	B949
B003-B004	G000-G062
B010-B011	G09
B020-B022	G20-G219
B050-B051	I672-I673
B060	I698
B200-B24	I709
B261-B262	I950-I959
B375	R75
B900	S017-Y899

I	(a)	Parkinson's disease	G219
	(b)	Tuberculous meningitis	A170
	(c)		

I	(a)	Parkinsonism	G219
	(b)	Arteriosclerosis	I709
	(c)		

I	(a)	Secondary Parkinson's disease	G219
	(b)		
	(c)		

22. Cerebral Sclerosis (G379)

Code I672 (Cerebrovascular atherosclerosis):

a. When reported due to or on the same line with:

A500-A539	M100-M109
E000-E349	M300-M359
E660-E669	N000-N289
E700-E839	N390
E890-E899	Q600-Q619
I10-I139	Q630-Q639
I672	Q890-Q892
I700-I709	R54
I770	T383
I99	Y423

b. When reported as causing:

I600-I679

I	(a)	Cerebral edema	G936
	(b)	Cerebral sclerosis	G379
I	(a)	Cerebral thrombosis	I633
	(b)	Cerebral sclerosis	I672
I	(a)	ASHD	I251
	(b)		
	(c)		
II		Cerebral sclerosis, hypertension	1672 I10

23. Myopathy (G729)

Code I429 (Cardiomyopathy):

When reported due to:

A162-A1690	E648-E649	K760
A178	E660-E669	K768-K769
A181	E740	M100-M109
A188	E760-E769	M300-M359
B200-B24	E831	M625
B332	E850-E859	N000-N399
B560-B575	E880-E889	P200-P220
C000-C97	F100-F199	Q200-Q249
D151	G111	R31
D467-D469	G600	R54
D500-D649	G700-G729	R75
D758	I00-I259	T360-T66
D860-D869	I300-I429	Y400-Y599
E000-E0390	I514-I5150	Y842
E050-E059	I700-I709	Y883
E100-E149	K700-K709	
E220	K721	
E40-E519	K730-K739	
E639	K743	
E641	K745-K746	

I	(a) Myopathy	I429
	(b) ASHD	I251
	(c)	

Code I(a) cardiomyopathy, I429, since reported due to a specific heart condition.

24. Brain Damage, child (G809)

Code G939 (Brain damage):

When reported due to:

A000-F199	M000-N399	R400-R402
F200-F99	N700-N889	R54
G000-G98	P000-Q999	R560-R5800
H600-H749	R02	R600-R609
H950-J80	R040-R049	R630
J82 -J989	R060-R068	R75
K700-K769	R090-R092	S000-Y899
L00-L989	R291	

Male, 11 years

I	(a) Cardiac arrest	I469
	(b) Brain damage	G809

Since the age of the decedent is less than 18 years of age and there is no indication of the cause of the brain damage, code G809, brain damage, child.

Male, 11 years

I	(a) Brain damage	G939
	(b) Down's syndrome	Q909

Since there is an indication of the cause of the brain damage, code brain damage, G939.

25. Paralysis (any G81, G82, or G83 excluding senile paralysis)

Code the paralysis for decedent age 28 days and over to G80 (Infantile cerebral palsy) with appropriate fourth character:

When reported due to:

P000-P969

Female, 3 months

I	(a)	Pneumonia	1wk	J189
	(b)	Paraplegia	3 mos	G808
	(c)	Injury spinal cord since birth		P115

Code the paraplegia on I(b) to infantile paraplegia, G808, since reported due to an injury of the spinal cord since birth.

26. Cataract (H269)

Code H264 (Secondary cataract):

When reported due to:

A1690	H269
B200-B24	H579
E100-E149	R54
E160-E162	R75
E711	T66
E742	Y493
E830	Y540
E835	Y576
H264	

I	(a) CVA	I64
	(b) Cataract	H264
	(c) Diabetes	E149

Code I(b), secondary cataract, H264, since it is reported due to diabetes (E149).

27. Varices NOS and Bleeding Varices NOS (I839)

Code (a) I859 (Esophageal varices) or
(b) I850 (Bleeding esophageal varices):

When reported due to or on same line with:

Alcoholic disease classified to: F100-F109
Liver diseases classified to: B150-B199, B251, B942, K700-K769

I	(a) Varices	I859
	(b) Cirrhosis of liver	K746

I	(a) Bleeding varices	I850
	(b) Cirrhosis of liver	K746

28. Pneumonia in J188 or J189
Bronchopneumonia (J180)
Lobar pneumonia, organism unspecified only in J181

Code J182 (Hypostatic pneumonia):

When reported due to:

Bedbound	Lying in bed
Bedfast	Prolonged recumbency
Bedrest	Recumbency
Bedridden	Sitting in chair
Bed Patient	Stasis
Confined to bed	
Hypostasis	
Immobility	
Immobilization	
Inactivity	

I	(a)	Cardiac arrest	I469
	(b)	Bronchopneumonia	J182
	(c)	Inactivity	

29. Pneumoconiosis (J64)

Code J60 (Coal worker's pneumoconiosis):

When Occupation is reported as:

Coal miner
Coal worker
Miner

Occupation: Coal Miner

I	(a)	Bronchitis	J40
	(b)	Pneumoconiosis	J60

30. Diaphragmatic Hernia in K44.-

Code Q790 (Congenital diaphragmatic hernia):
When reported as causing hypoplasia or dysplasia of lung NOS (Q336).

I	(a)	Lung dysplasia	Q336
	(b)	Diaphragmatic hernia	Q790
	(c)		

31. Biliary Cirrhosis NOS (K745)

Code K744 (Secondary biliary cirrhosis):

When reported due to:

A000-B99	K730-K760
C000-D539	K761
D730-D739	K763
E02-E0390	K768-K909
E100-E149	Q410-Q459
E500-E849	Q900-Q999
F100-F169	R75
F180-F199	R780
I050-I099	T360-T659
I110-I119	X40-X49
I130-I519	Y400-Y599
I81	Y640
K500-K519	Y86
K630-K639	Y880
K700-K718	Y881

I	(a)	Biliary cirrhosis	K745
	(b)		
	(c)		
I	(a)	Primary biliary cirrhosis	K743
	(b)		
	(c)		
I	(a)	Secondary biliary cirrhosis	K744
	(b)		
	(c)		
I	(a)	Biliary cirrhosis	K744
	(b)	Carcinoma pancreas	C259
	(c)		

32. Lupus Erythematosus (L930)
Lupus (L930)

Code M321 (Systemic lupus erythematosus with organ or system involvement):

When reported as causing a disease of the following systems:

Anemia
Circulatory (including cardiovascular, lymph nodes, spleen)
Gastrointestinal
Musculoskeletal
Respiratory
Thrombocytopenia
Urinary

I	(a)	Nephritis	N059
	(b)	Lupus erythematosus	M321
	(c)		

33. Gout (M109)

Code M104 (Secondary gout):

When reported due to:

B200-B24	L100-L109
C880-C959	L120-L449
D45	L510-L569
D550-D599	L578-L589
D751	L930-L932
D758	L945
E168	L951
E740	L981
F100-F102	M100-M109
F109	R75
K700-K769	

I	(a)	Perforated gastric ulcer	K255
	(b)	Gout	M104
	(c)	Waldenstrom's macroglobulinemia	C880

34. Polyarthrosis (M159)

Code M153 (Secondary multiple arthrosis):

When reported due to:

A399
B200-B24
E660-E669
G810-G839
M150-M1990
N924
N950-N959
R54
R75
S000-T983

I	(a) Hypostatic pneumonia	J182
	(b) Polyarthrosis	M153
	(c) Obesity	E669

Code I(b) secondary multiple arthrosis, M153, since it is reported due to obesity.

35. Coxarthrosis (M169)

Code (a) M166 (Coxarthrosis, secondary bilateral):
(b) M167 (Coxarthrosis, secondary, NEC unilateral):

When reported due to:

A399
B200-B24
E660-E669
G810-G839
M150-M161
M166-M1990
N924
N950-N959
R54
R75

I	(a) Pneumonia	J189
	(b) Debility	R53
	(c) Coxarthrosis	M167
	(d) Polyarthrosis	M159

Code I(c) secondary coxarthrosis, M167, since it is reported due to polyarthrosis (M159).

36. Gonarthrosis (M179)

Code M174 (Secondary gonarthrosis bilateral):
M175 (Secondary gonarthrosis unilateral):

When reported due to:

A399
B200-B24
E660-E669
G810-G839
M150-M171
M174-M1990
N924
N950-N959
R54
R75

I	(a) Pneumonia, gonarthrosis	J189	M175
	(b) Hemiplegia	G819	
	(c) Old CVA	I694	

Code I(a) secondary gonarthrosis on, M175, since it is reported due to hemiplegia.

37. Arthrosis (M199)

Code M192 (Secondary arthrosis):

When reported due to:

A399
B200-B24
E660-E669
G810-G839
M150-M190
M192-M1990
N924
N950-N959
R54
R75

I	(a)	Pathological fractures	M844
	(b)	Arthrosis	M192
	(c)	Senility	R54

Code I(b) secondary arthrosis, M192, since reported due to senility.

38. Kyphosis (M402)

Code M401 (Secondary kyphosis):

When reported due to:

A1690	G110-G119	M960-M969
A180	G20-G2000	Q050-Q059
B902	G35-G379	Q760-Q799
B91	G540-G549	Q850
C400-C419	G600-G839	Q870-Q878
C490-C499	G950-G959	Q893-Q999
C795	G970-G979	S000-Y899
D166	M000-M120	
D480	M150-M1990	
E200-E215	M320-M351	
E550-E559	M359-M489	
E890-E899	M800-M949	

I	(a) COPD	J449
	(b) Kyphosis	M401
	(c) Spinal osteoarthritis	M479

Code I(b) secondary kyphosis since reported due to spinal osteoarthritis.

39. Scoliosis (M419)

a. Code M414 (Neuromuscular scoliosis):

When reported due to:

A800-A809	G700-G709
B91	G800-G809
G111	M414

I	(a)	Respiratory failure		J969
	(b)	Severe scoliosis	years	M414
	(c)	Polio	years	B91

Code I(b) neuromuscular scoliosis, M414, since reported due to polio (B91).

b. Code M415 (secondary scoliosis):

When reported due to:

A1690	G20-G2000	M800-M949
A180	G360-G379	M960-M969
B902	G540-G549	Q050-Q059
C400-C419	G600-G64	Q760-Q799
C490-C499	G950-G959	Q850
C795	G970-G979	Q870 Q878
D166	M000-M120	Q893 Q999
D480	M150-M1990	S000 Y899
E200-E215	M320-M351	
E550-E559	M359-M413	
E890-E899	M415-M489	

I	(a)	Pneumonia	J189
	(b)	Scoliosis	M415
	(c)	Progressive systemic sclerosis	M340

Code I(b) secondary scoliosis, M415, since reported due to progressive systemic sclerosis.

40. Osteonecrosis (M879)

Code M873 (Secondary osteonecrosis):

When reported due to:

A000-A399	D480	M463-M479
A400-A419	D550-D589	M600
A420-B889	H650-H669	M860-M870
B89	J00-J399	M873
B900-B949	L00-L089	M878-M889
B99	M000-M1990	M894
C400-C419	M320-M351	M910-M939
C763	M359	N340-N343
C795	M420-M429	N390
C810-C969	M45-M461	N700-N768
D160-D169	M462	R75

I	(a) Septicemia	A419
	(b) Osteonecrosis hip	M873
	(c) Infective myositis	M600

Code I(b) secondary osteonecrosis since it is reported due to infective myositis (M600).

41. Dysmenorrhea (N946)

Code N945 (Secondary dysmenorrhea):

When reported due to:

C530-C55	N800-N809
C798	N840-N841
D060-D069	N850-N889
D073	N945
D250-D269	Q510-Q519
D390	Q528
N710-N739	

I	(a) Anemia and gastric ulcer	D649	K259
	(b) Menorrhagia with dysmenorrhea	N920	N945
	(c) Cancer of endocervix	C530	

Code I(b) secondary dysmenorrhea, N945, since it is reported due to cancer of endocervix (C530).

42. Cesarean Delivery for Inertia Uterus (O622)
Cervical Dystocia (O622):
Hypotonic Labor (O622):
Hypotonic Uterus Dysfunction (O622):
Inadequate Uterus Contraction (O622)
Uterine Inertia During Labor (O622):

Code O621 (Secondary uterine inertia):

When reported due to:

O100-O209	O440-O469
O230-O249	O621
O260-O264	O670-O679
O266-O269	O95
O310	O980-O998
O330-O349	

I	(a)	Cardiac arrest	O754
	(b)	Uterine inertia	O621
	(c)	Diabetes mellitus of pregnancy	O249

Code I(b) secondary uterine inertia since it is reported due to diabetes mellitus of pregnancy (O249).

43. Intracranial Nontraumatic Hemorrhage of Fetus and Newborn (P52)

Code P10 (Intracranial laceration and hemorrhage due to birth injury) with the appropriate fourth character:

When reported due to:

P030-P039
P100-P112
P119
P130-P131
P159

Male, 9 hours

I	(a) Cerebral hemorrhage	P101
	(b) Fractured skull during birth	P130
	(c)	

Code I(a) as cerebral hemorrhage due to birth injury since it is reported as due to a fracture skull occurring during birth.

Female, 2 weeks

I	(a) Cerebral hemorrhage	P101
	(b) Birth injury	P159
	(c)	

Code I(a) as cerebral hemorrhage due to birth injury.

44. Septal Defect, (heart) (atrial), (auricular), (ventricular), (Q210, Q211, Q212, Q219)

Code I510 (Acquired septal defect) providing there is no indication the defect is congenital:

a. When reported due to:

A000-A09	I400-I519	N990-N999	R500-R509
A181	I700-J80	P000-P049	R53-R54
A200-B89	J82-J989	P100-Q079	R560-R609
B908-E899	K20-K929	Q240-Q249	R634-R635
F100-F199	L89	Q260-Q349	R64
G000-G419	L97	Q380-Q459	R688-R799
G450-G459	L984	Q600-Q799	S000-Y899
G500-G729	M000-M1990	Q850-R098	
G900-G98	M300-M549	R11	
H650-H839	M800-M959	R160-R18	
I00-I029	N000-N399	R222	
I10-I339	N600-N96	R300-R398	

b. When reported on the same line with:

I110-I119
I130-I139
I200-I339
I400-I519

I	(a)	Cardiac arrest	I469
	(b)	Ventricular septal defect	I510
	(c)	Myocardial infarction	I219

45. Hypoplasia or Dysplasia of Lung NOS (Q336)

Code P280 (Primary atelectasis of newborn):

When reported anywhere on the record with the following codes and not reported due to diaphragmatic hernia in K44.- or in Q790, and there is no indication that the condition was congenital.

A500-A509
B200-B24
P000-P009
P011-P013
P050-P073
P220-P229
P280
P350-P399
P612
R75

I	(a) Hypoplasia lung		P280
	(b)		
	(c)		
II	Prematurity		P073

Female, 5 hrs.

I	(a) Dysplasia of lung	5 hrs	Q336
	(b)		
	(c)		
II	Hyaline membrane disease		P220

Code to Q336 since the duration and age are the same indicating that the condition was congenital.

46. Injury (S000-T149)

Code P10-P15 (Birth trauma):

a. When the age of decedent is less than 28 days

AND

b. There is no mention of external cause

AND

c. Reported due to a condition in P000-P969

Male, 5 days

I	(a)	Femur fracture	P132
	(b)	Breech delivery	P030

Code femur fracture as indexed Birth, injury, fracture, femur.

47. Fracture (any site) (T142)

Code M844 (Pathological fracture):

a. When reported due to:

A180	E550-E559	M843-M851	R54
A500-A509	E896-E899	M854-M889	T810-T819
A527-A539	M000-M1990	M893-M895	T840-T849
A666	M320-M351	M898-M939	T870-T889
C000-C97	M359	M941-M949	
D160-D169	M420-M429	M960	
D480	M45-M519	M966-M969	
D489	M600	Q770-Q789	
E210-E215	M800-M839	Q799	

b. When reported on the same line with:

C40-C41	M83
C795	M88
M80-M81	

NOTE: If accident box is checked, do not enter an external cause code.

I (a)	Fracture hip	M844
(b)	Osteoarthritis	M199
I (a)	Myocardial infarction	I219
(b)	ASHD	I251
(c)		
II	Fracture of spine due to arthritis causing fall	M844 M139 W19
I (a)	Pneumonia	J189
(b)	Osteoporosis c̄ fracture spine	M819 M844
I (a)	Pneumonitis	J189
(b)	Arteriosclerosis	I709
(c)	Fracture femur	M844

MOD II

1 | Accident | | Spontaneous in bed |

Code fracture of femur as pathological since certifier indicated it was spontaneous. Do not enter code for "accident" in checkbox.

48. Starvation NOS (T730)

Code E46 (Malnutrition NOS):

When reported due to:

A000-E649	K040-K069	Q200-Q824
E670-F509	K080-K929	Q850-Q999
F530-F539	L100-L129	R11
F608-F609	L510-L539	R13
F680-F73	L89	R54
F920	L97	R600-R609
F982-F983	L984	R630
F989-G98	M000-M1990	R633-R634
I00-J80	M300-N459	R75
J82-J989	N700-N768	S000-Y899
K020-K029	P000-Q079	

I	(a) Anemia	D649
	(b) Starvation	E46
	(c) Cancer of esophagus	C159

Code I(b) to E46, malnutrition, since this condition is reported due to a neoplasm.

I	(a) Starvation	E46
	(b) Crushed abdomen	S381
II	Auto accident	&V499

Code I(a) to E46, malnutrition, since this condition is reported due to an internal injury.

General information

Separate categories are provided in ICD-10 for coding malignant primary and secondary neoplasms (C00-C96), carcinoma in situ (D00-D09), benign neoplasms (D10-D36), and neoplasms of uncertain or unknown behavior (D37-D48). Categories and subcategories within these groups identify sites and/or morphological types.

Morphology describes the difference in type and structure of cells or tissues (histology) as seen under the microscope and behavior. The ICD Classification of neoplasms consists of several major morphological groups (types) of neoplasms including the following:

Carcinomas including squamous cell carcinoma and adenocarcinoma
Sarcomas and other soft tissue tumors including mesotheliomas
Lymphomas including Hodgkin's lymphoma and non-Hodgkin's lymphoma
Site specific types (types that indicate the site of the primary neoplasm)
Leukemias
Other specified morphological groups

The morphological types of neoplasms are listed in ICD-10 following Chapter XX in Volume 1 and also appear in Volume 3. Morphology, behavior, and site must all be considered when coding neoplasms. This may take the form of a reference to the appropriate column in the "Neoplasm" listing in the Index when the morphological type could occur in several organs. For example:

Adenoma, villous (M8261/1) - see Neoplasm, uncertain behavior

Or to a particular part of that listing when the morphological type originates in a particular type of tissue. For example:

Fibromyxoma (M8811/0) - see Neoplasm, connective tissue, benign

The Index may give the code for the site assumed to be most likely when no site is reported in a morphological type. For example:

Adenocarcinoma
- pseudomucinous (M8470/3)
-- specified site - see Neoplasm, malignant
-- unspecified site C56

Or the Index may give a code to be used regardless of the reported site when the vast majority of neoplasms of that particular morphological type occur in a particular site. For example:

Nephroma (M8960/3) C64

Always look up the morphological description in the Index before referring to the listing under "Neoplasm" for the site.

The morphological code numbers consist of five characters: the first four identify the histological type of the neoplasm and the fifth, following a slash, indicates its behavior. These morphological codes (M codes) are not used by NCHS for coding purposes.

The behavior of a neoplasm is an indication of how it will act. The following terms describe the behavior of neoplasms:

Benign (nonmalignant)	D10-D36
Uncertain or unknown behavior (undetermined whether benign or malignant)	D37-D48
In-situ (confined to one site)	D00-D09
Malignant, primary site (capable of rapid growth and of spreading to nearby and distant sites)	C00-C76, C80-C96
Malignant secondary (spread from another site; metastases	C77-C79

Unless it is specifically indexed, code a morphological term ending in "osis" in the same way as the tumor name to which "osis" has been added is coded. For example, code neuroblastomatosis in the same way as neuroblastoma. However, do not code hemangiomatosis that is specifically indexed to a different category in the same way as hemangioma.

All combinations of the order of prefixes in compound morphological terms are not indexed. For example, the term "chondrofibrosarcoma" does not appear in the Index, but "fibrochondrosarcoma" does. Since the two terms have the same prefixes (in a different order), code the chondrofibrosarcoma the same as fibrochondrosarcoma.

A. Malignant neoplasms (C00-C96)

The categories that have been provided for the Classification of malignant neoplasms distinguish between those that are stated or presumed to be primary (originate in) of the particular site or types of tissue involved, those that are stated or presumed to be secondary (deposits, metastases, or spread from a primary elsewhere) of specified sites, and malignant neoplasms without specification of site. These categories are the following:

C00-C75 Malignant neoplasms, stated or presumed to be primary, of specified sites and different types of tissue, except lymphoid, hematopoietic, and related tissue

C76 Malignant neoplasms of other and ill-defined sites

C77-C79 Malignant secondary neoplasm, stated or presumed to be spread from another site, metastases of sites, regardless of morphological type of neoplasm

C80 Malignant neoplasm of unspecified site (primary) (secondary)

C81-C96 Malignant neoplasms, stated or presumed to be primary, of lymphoid, hematopoietic, and related tissue

In order to determine the appropriate code for each reported neoplasm, a number of factors must be taken into account including the morphological type of neoplasm and qualifying terms. Assign all malignant neoplasms to the appropriate category for the morphological type of neoplasm, e.g. to the code shown in the Index for the reported term.
Morphological types of neoplasm include categories C40-C41, C43, C44, C45, C46, C47, C49, C70-C72, and C80. Specific morphological types include:

C40-C41 Malignant neoplasm of bone and articular cartilage of other and unspecified sites

Osteosarcoma
Osteochondrosarcoma
Osteofibrosarcoma
Any neoplasm cross-referenced as "See also Neoplasm bone, malignant"

I (a) Osteosarcoma of leg C402

Code the morphological type "Osteosarcoma" to Neoplasm, malignant, bone of the specified site as cross-referenced.

C43 Malignant melanoma of skin

Melanosarcoma
Melanoblastoma
Any neoplasm cross-referenced as "See also Melanoma"

I (a) Melanoma of arm C436

Based on the note in the Index, code melanoma of arm as indexed under **Melanoma, site Classification**.

I (a) Melanoma of stomach C169

Melanoma of stomach is not found under Melanoma in the Index. The term should be coded by site under Neoplasm, malignant.

C44 Other malignant neoplasm of skin

Basal cell carcinoma
Sebaceous cell carcinoma
Any neoplasm cross-referenced as "See also Neoplasm skin, malignant"

I (a) Sebaceous cell carcinoma nose C443

Code the morphological type "Sebaceous cell carcinoma" to Neoplasm, malignant, skin of the specified site as cross-referenced.

C49 Malignant neoplasm of other connective and soft tissue

Liposarcoma
Rhabdomyosarcoma
Any neoplasm cross-referenced as "See also Neoplasm, connective tissue, malignant"

I (a) Rhabdomyosarcoma abdomen C494

Code the morphological type "Rhabdomyosarcoma" to Neoplasm, malignant, connective tissue of the specified site as cross-referenced.

I (a) Sarcoma pancreas C259

Code the morphological type "Sarcoma" to Neoplasm, malignant, connective tissue of the specified site as cross-referenced. Refer to the "Note" under Neoplasm, malignant, connective tissue concerning sites that do not appear in this list.

C80 Malignant neoplasm without specification of site

Cancer
Carcinoma
Malignancy
Malignant tumor or neoplasm
Any neoplasm cross-referenced as "See also Neoplasm, malignant

I (a) Carcinoma of stomach C169

Code the morphological type "Carcinoma" to Neoplasm, malignant, stomach as indexed.

I (a) Cancer prostate C61

Code the morphological type "Cancer" to Neoplasm, malignant, prostate as indexed.

I (a) Adenosarcoma breast C509

Code the morphological type "Adenosarcoma" to Neoplasm, malignant, of the specified site as cross-referenced.

1. Neoplasms stated to be secondary

Categories C77-C79 include secondary neoplasms of specified sites regardless of the morphological type of the neoplasm. The Index contains a listing of secondary neoplasms of specified sites under "Neoplasm." Secondary neoplasms of specified sites without indication of the primary site require an additional code to identify the morphological type of neoplasm if the morphological type is classifiable to one of the following categories: C40, C41, C43, C44, C45, C46, C49, C70, C71, and C72.

I (a) Secondary melanoma of lung C439 C780

Melanoma is classified to C43; therefore, when stated secondary of a site, code Melanoma, unspecified site and secondary neoplasm of the reported site.

I (a) Secondary carcinoma of intestine C785

The morphological type of the term "carcinoma" is C80; therefore, code a secondary neoplasm code only.

2. Malignant neoplasms with primary site indicated

NOTE: If two or more malignant neoplasms are indicated as primary, refer to instructions under 5. Independent (primary) sites.

a. If a particular site is indicated as primary, it should be coded as primary and other neoplasms coded as secondary whether in Part I or Part II. The primary site may be indicated in one of the following ways:

(1) If two or more sites with the same morphology are reported, and one site is specified as primary in either Part I or II

I	(a) Carcinoma of bladder	C791
II	Primary in kidney	C64

Code carcinoma of bladder as secondary and code primary malignant neoplasm of kidney.

I	(a) Primary cancer of lung	C349
	(b) Cancer of breast	C798

Code primary malignant neoplasm of lung and code cancer of breast as secondary.

(2) The specification of other sites as "secondary," "metastases," "metastasis," "spread," or a statement of "metastasis NOS" or "metastases NOS"

I	(a) Carcinoma of breast	C509
	(b) Secondaries in brain	C793

Code I(a) primary malignant neoplasm of breast, and I(b) to secondary malignant neoplasm of brain.

I	(a) Stomach metastases	C788
	(b) Lung cancer	C349

Code I(a) secondary neoplasm of stomach and I(b) primary malignant neoplasm of lung.

I	(a) Brain metastases	C793
	(b) Liver cancer	C229

Code I(a) secondary neoplasm of brain and I(b) primary malignant neoplasm of liver.

I (a) Lung cancer with metastases C349 C80

Code (a) primary cancer of lung followed by the NOS code for metastases.

(3) Morphology indicates a primary malignant neoplasm

If a morphological type implies a primary site, such as hepatoma, consider this as if the word "primary" had been included.

I (a) Hepatoma C220

Code hepatoma as a primary neoplasm.

I (a) Carcinoma C80
(b) Pseudomucinous adenocarcinoma C56

Code I(a), Carcinoma, as neoplasm malignant, unspecified site. Code I(b) to primary malignant neoplasm of ovary, since pseudomucinous adenocarcinoma of unspecified site is assigned to the ovary in the Index.

b. If a morphological type of malignant neoplasm indicating primary is reported in Part I or Part II with a different morphological type of malignant neoplasm that is stated primary, consider both neoplasms to be primary.

I (a) Sarcoma of thigh C492
II Primary liver carcinoma C229

Code each neoplasm as indexed. Both I(a) Sarcoma of thigh and Part II Primary liver carcinoma are primary malignant neoplasms.

3. Site specific neoplasms

a. Certain neoplasms are classified or indexed directly to a specific site. Classify morphological types of neoplasms that appear in the Index with specific codes (site specific neoplasms) e.g. "Hepatocarcinoma (M8170/3) C220," as indexed.

I (a) Renal cell carcinoma C64

Code renal cell carcinoma as indexed.

b. If there is a conflict between the code for a site specific neoplasm and the stated site, code the site specific neoplasm as indexed and code the stated site as secondary. Enter the code for the secondary neoplasm on the same line with and immediately following the code for the site specific neoplasm.

I (a) Hepatocarcinoma of brain C220 C793

Code hepatocarcinoma as indexed and code secondary malignant neoplasm of brain as the second entry on I(a).

c. When a site specific neoplasm is reported due to the same site specific neoplasm, code each as indexed.

I (a) Bronchogenic carcinoma C349
(b) Bronchogenic carcinoma C349

Code I(a) and I(b) to bronchogenic carcinoma, as indexed.

4. Other morphological types of neoplasms

If adenocarcinoma, cancer, carcinoma, neoplasm (malignant) or tumor (malignant) of a site, except neoplasms classifiable to C81-C96, are reported due to a morphological type of neoplasm of unspecified site, code the neoplasm on the upper line qualified by the morphological type, and do not enter a code for the morphological type of unspecified site on the lower line if:

a. The morphological type of neoplasm reported on the lower line is C80.

I (a) Tumor of upper lung C341
(b) Carcinoma

Code the tumor on (a) modified by the morphological type (C80) on (b). Leave line (b) blank.

I (a) Cancer of bladder C679
(b) Papillary carcinoma

Code the cancer on (a) modified by the morphological type (C80) on (b). Leave line (b) blank.

b. The morphological type of neoplasm of unspecified site on the lower line is classified to the same site as the neoplasm on the upper line.

I (a) Cancer of brain C719
(b) Astrocytoma

Code the specified site on I(a) modified by the morphological type of unspecified site on I(b) since they are classified to the same site. Leave line (b) blank.

I (a) Adenocarcinoma of stomach C169
(b) Linitis plastica

Code the specified site on I(a) modified by the morphological type of unspecified site on I(b) since they are classified to the same site. Leave line (b) blank.

c. The morphological type of neoplasm of unspecified site on the lower line is classified according to the site affected, e.g., the malignant neoplasms classifiable to the following categories: C40, C41, C43, C44, C47, C49, C70, C71, and C72. Code the neoplasm on the upper line qualified by the morphological type on the lower line, and do not enter a code for the morphological type of unspecified site on the lower line.

I (a) Adenocarcinoma of face C433
(b) Melanoma

Code melanoma of face on I(a) and leave I(b) blank.

I (a) Carcinoma of leg C492
(b) Fibroliposarcoma

Code fibroliposarcoma of leg on I(a) and leave I(b) blank.

5. Independent (primary) sites

The presence of more than one primary neoplasm could be indicated in one of the following ways:

- mention of two different anatomical sites
- or two distinct morphological types (e.g. hypernephroma and intraductal carcinoma)
- or by a mix of a morphological type that implies a specific site, plus a second site.

It is highly unlikely that one primary would be due to another primary malignant neoplasm except for a group of malignant neoplasms of lymphoid, hematopoietic, and related tissue (C81-C96), within which, one form of malignancy may terminate in another (e.g. leukemia may follow non-Hodgkin's lymphoma).

a. If two or more sites are mentioned in Part I and there is no indication that either site is primary or secondary, code each site as indexed.

I	(a)	Cancer of stomach	3 months	C169
	(b)	Cancer of breast	1 year	C509

Code to primary malignant neoplasm of each site mentioned, since it is unlikely that one primary malignant neoplasm would be due to another.

I	(a)	Carcinoma of colon and rectum	C189 C20

Code both sites as primary and enter both on I(a).

b. If two or more morphological types of malignant neoplasm occur, one reported due to the other or reported anywhere on the record, code each as indexed.

I	(a)	Lymphosarcoma of mesentery	C850
II		Adenocarcinoma of cecum	C180

Code each as though the other had not been reported since there are two different morphological types of malignant neoplasms.

I	(a)	Cancer of esophagus	C159
	(b)	Hodgkin's sarcoma	C817

Code the cancer of the esophagus as primary and code the Hodgkin's sarcoma as indexed. They are different morphological types.

I	(a)	Leukemia	C959
II		Carcinoma of breast	C509

Code each neoplasm as indexed. Two different morphological types are mentioned.

c. If two or more morphological types of malignant neoplasm occur in lymphoid, hematopoietic or related tissue (C81-C96), code each as indexed. When acute exacerbation of, or blastic crisis (acute) in, chronic leukemia is reported, code both the acute form and chronic form. If stated acute and chronic, code both as indexed.

I	(a) Acute lymphocytic leukemia	C910	
	(b) Non-Hodgkin's lymphoma	C859	

Code each as indexed since both are morphological types classified within the categories C81-C96.

I	(a) Chronic lymphocytic leukemia with blastic crisis	C911	C910

Code both chronic lymphocytic leukemia and acute lymphocytic leukemia.

I	(a) Acute exacerbation of chronic	C910	C911
	(b) lymphocytic leukemia		

Code to the acute and chronic form when reported as acute exacerbation of a chronic form of leukemia and code both on the same line.

d. Do not use a neoplasm in a due to position to determine secondary and primary.

I	(a) Carcinoma of head of pancreas	C250
	(b) Carcinoma of tail of pancreas	C252

Code primary malignant neoplasm of head of pancreas for I(a) and code primary malignant neoplasm of tail of pancreas for I(b).

I	(a) Cancer of stomach	C169
	(b) Cancer of gallbladder	C23

Code each site primary.

I	(a) Cancer of breast	C509
	(b) Cancer of endometrium	C541

Code each site primary.

6. Metastases

Metastases is the spread of a primary malignant neoplasm to another site; therefore, metastases of a site is always secondary.

a. When malignancy NOS or any morphological type classifiable to C80 is reported with metastases of a site on a line, code C80 and the secondary neoplasm.

I (a) Malignancy with metastases of bladder — C80 C791

Code malignancy as first entry on I(a) and code secondary bladder neoplasm as the second neoplasm on I(a).

b. Although malignant cells can metastasize anywhere in the body, certain sites are more common than others and must be treated differently. If one of the common sites of metastases (excluding lung) is qualified by the word "metastatic," it should be coded as secondary (see other neoplasm instructions). However, if one of these sites appears alone on a death certificate and is not qualified by the word "metastatic," it should be considered primary.

Common sites of metastases:

Bone
Brain
Central nervous system
Diaphragm
Heart
Liver
Lung
Ill-defined sites (sites classifiable to C76)
Lymph nodes
Mediastinum
Meninges
Peritoneum
Pleura
Retroperitoneum
Spinal cord

I (a) Cancer of brain — C719

Code primary cancer of brain since it is reported alone on the certificate.

- (1) Special Instruction: Lung
  The lung poses special problems in that it is a common site for both metastases and primary malignant neoplasms. Lung should be considered as a common site of metastases whenever it appears in Part I with sites not on this list. If lung is mentioned anywhere on the certificate and the only other sites are on the list of common sites of metastases, consider lung primary. However, when the bronchus or bronchogenic cancer is mentioned, this neoplasm should be considered primary.

I	(a)	Carcinoma of lung	C349

  Code primary malignant neoplasm of lung since it is reported alone on the certificate.

I	(a)	Cancer of bone	C795
	(b)	Carcinoma of lung	C349

  Code primary malignant neoplasm of lung on I(b) since bone is on the list of common sites of metastases and lung can, therefore, be assumed to be primary.

I	(a)	Carcinoma of bronchus	C349
	(b)	Carcinoma of breast	C509

  Code primary malignant neoplasm of bronchus on I(a) and primary malignant neoplasm of breast on I(b). Do not code I(a) as secondary malignant neoplasm, because bronchus is excluded from the list of common sites.

- (2) Special Instruction: Lymph Node
  Malignant neoplasm of lymph nodes not specified as primary should be assumed to be secondary.

I	(a)	Cancer of cervical lymph nodes	C770

  Code secondary malignant neoplasm of cervical lymph nodes.

7. Multiple sites

a. If all sites reported (anywhere on certificate) are on the list of common sites of metastases, code to secondary neoplasm of each site of the morphological type involved, unless lung is mentioned, in which case code to (C349) primary malignant neoplasm of lung.

I	(a)	Cancer of liver	C787
	(b)	Cancer of abdomen	C798

Code to secondary neoplasm of both sites since both are on the list of common sites of metastases. Abdomen is one of the ill-defined sites included in the C76.- category.

I	(a)	Malignant carcinoma of pleura and mediastinum	C782 C781

Code secondary malignant neoplasm of pleura and secondary malignant neoplasm of mediastinum on I(a).

I	(a)	Peritoneal carcinoma	C786
II		Liver carcinoma	C787

Code secondary malignant neoplasm of peritoneum on I(a) and secondary malignant neoplasm of liver in Part II.

I	(a)	Cancer of brain	C793
	(b)	Cancer of lung	C349

Code I(a) secondary cancer of brain since brain is on the list of common sites. Code I(b) primary cancer of lung because the only other site mentioned is on the list of common sites.

b. If one or more of the common sites of metastases, excluding lung, is reported and one or more site(s) or one or more morphological type(s) is mentioned on the certificate, none specified as primary, code the common site(s) secondary and the other site(s) or morphological type(s) primary.

I	(a)	Cancer of stomach	C169
	(b)	Cancer of liver	C787

Code I(a) primary cancer of stomach and code I(b) secondary cancer of liver since liver is on the list of common sites and stomach is not.

I	(a) Liver cancer	C787
	(b) Bladder cancer	C679
	(c) Colon cancer	C189

Code I(a) secondary neoplasm of liver since liver is on the list of common sites of metastases. Code I(b) and I(c) as primary.

I	(a) Peritoneal cancer	C786
II	Mammary carcinoma	C509

Code I(a) secondary peritoneal cancer since peritoneum is on the list of common sites. Code Part II primary carcinoma of breast.

I	(a) Brain carcinoma	C793
II	Melanoma of scalp	C434

Code I(a) secondary brain carcinoma since brain is on the list of common sites. Code Part II melanoma of scalp.

NOTE: If a malignant neoplasm of lymphatic, hematopoietic, or related tissue (C81-C96) is reported in one part and one of the common sites is mentioned in the other part, code the common site primary.

I	(a) Brain cancer	C793
	(b) Lymphoma	C859

Code I(a) secondary brain cancer since brain is on the list of common sites and is reported in the same part with a neoplasm indexed to C859.

I	(a) Brain cancer	C719
II	Lymphoma	C859

Code I(a) primary brain cancer. Brain is on the list of common sites of metastases, but it is reported in one part and a neoplasm indexed to C859 is reported in the other part.

c. If lung is mentioned in the same part with another sites(s), not on the list of common sites, or one or more morphological type(s), code the lung as secondary and the other site(s) primary.

I	(a) Lung cancer	C780
	(b) Stomach cancer	C169

Code secondary lung cancer on I(a) and code primary stomach cancer on I(b) since both are in the same part.

I	(a) Lung cancer	C780
	(b) Leukemia	C959

Code secondary lung cancer on I(a) and code leukemia on I(b) since both are in the same part.

I	(a) Bladder carcinoma	C679
II	Lung cancer, breast cancer	C780 C509

Code I(a) primary bladder carcinoma and code primary breast cancer in Part II. Code secondary lung cancer in Part II. Lung is in the same part with another site.

d. If lung is mentioned in one part, and one or more site(s), not on the list of common sites, or one or more morphological type(s) is mentioned in the other part, code the lung as primary and the other site(s) or other morphological type primary.

I	(a) Stomach cancer	C169
II	Lung cancer	C349

Code primary stomach cancer on I(a) and code primary lung cancer in Part II. Lung is mentioned in one part and the other site is mentioned in the other part.

I	(a) Leukemia	C959
II	Lung cancer	C349

Code leukemia on I(a) and code primary lung cancer in Part II. Lung is mentioned in one part and the other morphological type is mentioned in the other part.

8. Metastatic neoplasms

The adjective "metastatic" is used in two ways–sometimes meaning a secondary neoplasm from a primary elsewhere and sometimes denoting a primary that has given rise to metastases. Neoplasms qualified as metastatic are **always** malignant, either primary or secondary. In order to avoid confusion, use the following to determine whether to code a metastatic neoplasm as primary or secondary.

a. Malignant neoplasm described as "from" or "metastatic from" a specified site should be interpreted as primary of that site and all other sites should be coded as secondary unless stated as primary whether in Part I or Part II.

I	(a)	Metastatic teratoma from ovary	C80
	(b)		C56

Interpret as: I (a) Metastatic teratoma
(b) Primary ovary teratoma

Then, code I(b) to primary malignant neoplasm of ovary since it states metastatic from ovary. Code I(a) to C80, malignant neoplasm, unspecified site.

I	(a)	Metastatic cancer from kidney	C80
	(b)		C64

Interpret as: I (a) Metastatic cancer
(b) Primary kidney cancer

Then, code I(b) to primary malignant neoplasm of kidney since it states metastatic from kidney. Code I(a) to C80, malignant neoplasm, unspecified site.

I	(a)	Carcinomatosis	C80
	(b)	Metastatic from bowel	C260
II		Carcinoma of rectum	C785

Code I(b) primary neoplasm of bowel. Code the site in Part II as secondary.

b. Malignant neoplasms of morphological type C80 of unspecified site described "to a site" or "metastatic to a site" should be interpreted as secondary of that site(s).

I	(a)	Metastatic carcinoma to the rectum	C785

Code to secondary malignant neoplasm of rectum. The word "to" indicates that the rectum is secondary.

I (a) Metastatic carcinoma to lungs and liver C780 C787

Code I(a) secondary neoplasm of lungs and liver since the record states "metastatic to."

I (a) Metastatic carcinoma to lungs and liver C780 C787
(b) Bladder carcinoma C679

Code I(a) secondary neoplasm of lungs and liver since it states "metastatic to" and code I(b) primary malignant bladder carcinoma.

c. Malignant neoplasms described as "from a site to a site" should be interpreted as primary of the site stated "from" and secondary of all other sites unless stated primary whether in Part I or Part II

I (a) Metastatic cancer from bowel to liver C787
(b) C260

Code I(a) secondary liver neoplasm. Interpret metastatic cancer from bowel to be a statement of primary and code I(b) primary cancer of bowel.

I (a) Metastatic cancer from liver to abdomen C798
(b) C229

Code secondary malignant neoplasm of abdomen on I(a) and primary malignant neoplasm of liver on I(b).

I (a) Malignant neoplasm of bone from leg C795
(b) C765

Code I(a) secondary bone neoplasm. Interpret metastatic neoplasm of bone from leg to be a statement of primary and code I(b) primary malignant neoplasm of leg.

d. Malignant neoplasm described as (of) a site to a site should be interpreted as primary of the site preceding "to a site" and all other sites should be coded as secondary unless stated as primary, whether in Part I or Part II.

I (a) Cancer of breast C509
(b) Metastatic to mediastinum C781

Code I(a) to primary malignant neoplasm of breast and I(b) to secondary malignant neoplasm of mediastinum since it is reported as "metastatic to." Enter the codes on the lines where reported.

I (a) Metastatic liver cancer to the brain C229 C793
II Esophageal cancer C788

Code liver cancer as primary since it is the site preceding "to a site" and code other sites as secondary.

e. If the morphological type of neoplasm classifiable to one of the following categories: C40, C41, C43, C44, C45, C46, C49, C70, C71, and C72 is described as "to a site" or "metastatic to a site," code the site that follows as secondary.

I (a) Metastatic osteosarcoma to brain C419 C793

Code to malignant neoplasm of bone since this is the unspecified site of osteosarcoma. Code secondary brain neoplasm.

f. Consider any form of the following terms as synonymous with "metastases or metastatic to" when these terms follow or are reported as due to a malignant neoplasm classifiable to C00-C76, C80, C81-C96.

Extension Infiltration Invasion Involvement Metastatic Secondaries Spread	in, into, of, or to another site

I (a) Ca of stomach with invasion of lung C169 C780

Code cancer of stomach primary and invasion of lung as secondary.

I (a) Carcinoma of bladder with
(b) infiltration into the ureter C679 C791

Code carcinoma of bladder as primary and code secondary carcinoma of ureter since it is the site following "infiltration into."

g. The terms "metastatic" and "metastatic of" should be interpreted as follows:

(1) If one site is mentioned and this is qualified as metastatic, code to malignant primary of that particular site if the morphological type is C80 and the site is not a common site of metastases, excluding lung.

I (a) Metastatic carcinoma of pancreas C259

Code primary malignant neoplasm of pancreas since one site is reported and it is not a common site.

I (a) Metastatic cancer of lung C349

Code to primary malignant neoplasm of lung since no other site is mentioned.

(2) If no site is reported but the morphological type is qualified as metastatic, code to primary site unspecified of the particular morphological type involved. Do not use "metastatic" to qualify a malignant neoplasm, stated or presumed to be primary, of lymphoid, hematopoietic and related tissue, classifiable to C81-C96 as secondary.

I (a) Metastatic melanoma C439

Code as indexed. Melanoma is a morphological type of neoplasm and is indexed to C439.

I (a) Metastatic Hodgkin's Disease C819

Code a morphological type of neoplasm that is classified to C81-C96 as indexed regardless of whether qualified as metastatic.

(3) Site-specific neoplasms reported as metastatic

(a) When a site specific neoplasm is qualified as metastatic code as indexed.

I (a) Metastatic hypernephroma C64

Code as indexed. Hypernephroma is a site specific neoplasm and indexed to C64.

I (a) Metastatic meningioma C709

Metastatic meningioma is a malignant site specific morphological type of neoplasm. Code as indexed under Meningioma, malignant.

(b) If there is a conflict between the code for a site specific neoplasm and the stated site, code the site specific neoplasm as indexed and consider the stated site to be qualified as secondary and code accordingly. Enter the code for the secondary site on the same line with and immediately following the code for the site specific neoplasm.

I (a) Metastatic renal cell carcinoma C64 C780
(b) of lung

Code the site specific neoplasm, renal cell carcinoma followed by the code for secondary neoplasm of lung.

I (a) Metastatic hepatoma of brain C220 C793

Code the site specific neoplasm, hepatoma as indexed followed by the code for secondary brain neoplasm.

(4) If a single morphological type and a site, other than a common site of metastases are qualified as metastatic, code to the specific category for the morphological type and site involved.

I (a) Metastatic melanoma of arm C436

Code to malignant melanoma of skin of arm (C436), since in this case the ill-defined site of arm is a specific site for melanoma, not a common site of metastases classifiable to C76.

I (a) Metastatic sarcoma of stomach C169

Code as indexed.

(5) If a single C80 morphological type is qualified as metastatic and the site mentioned is one of the common sites of metastases **except lung**, code to secondary malignant neoplasm of the site mentioned. If the single site is lung, qualified as metastatic, code to primary of lung.

I (a) Metastatic cancer of peritoneum C786

Code to secondary cancer of peritoneum since peritoneum is on the list of common sites of metastases and the morphological type of neoplasm is classified to C80.

I (a) Metastatic cancer of lung C349

Code to primary malignant neoplasm of lung, C349, since no other site is mentioned.

(6) If a single morphological type, other than C80 type, is qualified as metastatic and the site mentioned is one of the common sites of metastases **except lung**, code the unspecified site for the morphological type. Code the common site as secondary and as a second entry on the same line.

I (a) Metastatic rhabdomyosarcoma of C499 C771
(b) hilar lymph nodes

Code to unspecified site for rhabdomyosarcoma and code the lymph nodes as secondary.

I (a) Metastatic sarcoma of lung C349

Code to malignant neoplasm of lung since lung is not considered a common site for this instruction.

EXCEPTION: Metastatic mesothelioma or Kaposi's sarcoma.

1. If site IS indexed under "Mesothelioma or Kaposi's sarcoma," assign that code.

   I (a) Metastatic mesothelioma of liver C457

   Code site as indexed under mesothelioma.

   I (a) Metastatic mesothelioma of mesentery C451

   Code as indexed under mesothelioma.

2. If site is NOT indexed under "Mesothelioma or Kaposi's sarcoma" and site reported is NOT a common site of metastases - assign code for specified site NEC.

   I (a) Metastatic mesothelioma of kidney C457

   Code mesothelioma specified site NEC. Kidney is not a common site of metastases.

3. If site is NOT indexed under "Mesothelioma or Kaposi's sarcoma" and site reported IS a common site of metastases - assign code for unspecified site and secondary code for common site.

   I (a) Metastatic mesothelioma of C459 C779
   (b) lymph nodes

   Code the morphological type as the first entry followed by the code for the site not indexed under mesothelioma.

   I (a) Metastatic Kaposi's of brain C469 C793

   Code the morphological type and code brain as secondary. Brain is on the list of common sites of metastases.

   I (a) Kaposi's sarcoma of brain C467

   This instruction does not apply since Kaposi's sarcoma is not qualified as metastatic. Code Kaposi's sarcoma, specified site, since not qualified as metastatic.

(7) When morphological types of neoplasms classifiable to C40, C41, C43, C44, C45, C46, C47, C49, C70, C71, and C72 without mention of a site are jointly reported with the same morphological type of neoplasm with mention of a site, code the morphological type of unspecified site as indexed.

   I (a) Metastatic rhabdomyosarcoma C499
   (b) Rhabdomyosarcoma kidney C64

   Code to unspecified site of rhabdomyosarcoma on I(a) and code rhabdomyosarcoma kidney as indexed.

h. More than one malignant neoplasm qualified as metastatic.

(1) If two or more sites with a morphology of C80, not on the list of common sites of metastases, are reported and all are qualified as "metastatic" code as follows:

(a) If the sites are in the same anatomical system code each site as primary. Use the list below to determine if the sites are in the same organ system.

C150-C269	Digestive system
C300-C399	Respiratory system
C400-C419	Bone and articular cartilage of limbs, other, and unspecified sites
C490-C499	Connective and soft tissue
C510-C579	Female genital organ
C600-C639	Male genital organ
C64-C689	Urinary organ
C690-C699	Eye and adnexa
C700-C729	Central nervous system
C73 -C759	Thyroid and other endocrine glands

I (a) Metastatic stomach carcinoma C169
(b) Metastatic pancreas carcinoma C259

Code both sites primary since they are a C80 morphological type, are in the same organ system, and neither is on the list of common sites of metastases.

(b) If the sites are in different anatomical systems, code each as secondary.

I (a) Metastatic carcinoma of stomach C788
(b) Metastatic carcinoma of bladder C791

Code secondary neoplasm of each site listed. Stomach and bladder are in two different anatomical systems.

(2) If two or more morphological types are qualified as metastatic, code to malignant neoplasms, each independent of the other.

I (a) Metastatic adenocarcinoma of bowel C260
(b) Metastatic sarcoma of uterus C55

Code to primary neoplasm of each site since adenocarcinoma and sarcoma are of different morphological types.

I (a) Metastatic cancer of pleura C782
(b) Metastatic melanoma of back C435

Code I(a) to secondary neoplasm of pleura since pleura is on the list of common sites of metastases. Code I(b) to melanoma of back (C435) from the site list under melanoma.

(3) If a morphology implying site and an independent anatomical site are both qualified as metastatic, code to secondary malignant neoplasm of each site.

I (a) Metastatic colonic and renal cell carcinoma C785 C790

Code both sites as secondary.

(4) If more than one site with a morphology of C80 is mentioned code as follows:

(a) If all but one site is qualified as metastatic and/or appear on the list of common sites of metastases, including lung, code to primary neoplasm of the site that is not qualified as metastatic or not on the list of common sites of metastases, irrespective of the order of entry or whether it is in Part I or Part II. Code all other sites as secondary.

I (a) Metastatic carcinoma of stomach C788
(b) Carcinoma of gallbladder C23
(c) Metastatic carcinoma of colon C785

Code primary carcinoma of gallbladder since it is the only site not specified as metastatic. Assign a primary code on I(b) and secondary codes on I(a) and I(c).

I (a) Metastatic carcinoma of stomach C788
(b) Metastatic carcinoma of lung C780
II Carcinoma of colon C189

Code I(a) and I(b) secondary and code primary carcinoma of colon in Part II since this is the only malignant neoplasm not qualified as metastatic, even though it is in Part II.

I	(a) Cancer of kidney	C64
	(b) Metastatic cancer of prostate	C798

Code I(a) primary cancer of kidney since the only other site on the record is qualified as metastatic. Code I(b) secondary cancer of prostate since it is qualified as metastatic.

I	(a) Metastatic cancer of ovary	C796
II	Cancer of colon	C189

Code I(a) secondary and code part II primary. There are two sites reported and one is qualified as metastatic while the second site is not reported metastatic.

(b) If all sites are qualified as metastatic and/or are on the list of common sites of metastases, including lung, code to secondary malignant neoplasm of all reported sites.

I	(a) Metastatic cancer of stomach	C788
	(b) Metastatic cancer of breast	C798
	(c) Metastatic cancer of lung	C780

Code secondary neoplasm of each site listed. All sites are reported as metastatic.

I	(a) Metastatic carcinoma of ovary	C796
	(b) Carcinoma of lung	C780
	(c) Metastatic pancreatic carcinoma	C788

Code to secondary malignant neoplasm of each site. Lung is on the list of common sites of metastases and ovary and pancreas are both reported as metastatic.

I	(a) Metastatic stomach cancer	C788
	(b) Lung cancer	C780

Code to secondary malignant neoplasm of each site. Lung is on the list of common sites of metastases and stomach cancer is reported as metastatic.

I	(a) Carcinoma of spine	C795
	(b) Metastatic lung cancer	C780

Code to secondary malignant neoplasm of each site. Spine is on the list of common sites of metastases and lung is reported as metastatic.

I (a) Metastatic carcinoma of abdomen C798
(b) Metastatic carcinoma of colon C785

Code both sites as secondary since both are qualified as metastatic.

I (a) Metastatic brain carcinoma C793
(b) Metastatic lung carcinoma C780

Code both sites as secondary malignant neoplasm since both are qualified as metastatic.

(5) When a metastatic malignant neoplasm is reported on a record with a malignant neoplasm of the same site whether stated as metastatic or not, code both primary.

I (a) Metastatic gastric carcinoma C169
(b) Gastric carcinoma C169

Code primary gastric carcinoma on I(a) and code primary gastric carcinoma on I(b).

(6) If two or more sites with a morphology of C40, C41, C43, C44, C45, C46, C47, C49, C70, C71, and C72 are reported and all sites are qualified as metastatic, add an additional code to identify the morphological type of neoplasm. Code the morphological type of neoplasm to the unspecified site category, i.e., to "9." Enter this code on the same line with and preceding the code for the first mentioned secondary site.

I (a) Metastatic leiomyosarcoma arm, stomach and brain C499 C798 C788 C793

Code leiomyosarcoma, the morphological type of neoplasm, to C499 and code the reported sites as secondary neoplasms since all three sites are qualified as metastatic.

I (a) Metastatic sarcoma of stomach and small intestine C499 C788 C784

Code the sarcoma, the morphological type of neoplasm, to C499 and code the reported sites as secondary neoplasms.

9. Primary site unknown

Consider the following terms as equivalent to "primary site unknown:"

? Origin (Questionable origin)
? Primary (Questionable primary)
? Site (Questionable site)
? Source (Questionable source)
Undetermined origin
Undetermined primary
Undetermined site
Undetermined source
Unknown origin
Unknown primary
Unknown site
Unknown source

a. When the statement, "primary site unknown," or its equivalent, appears anywhere on the certificate with a site specific neoplasm or a neoplasm classifiable to C81-C96, code the neoplasm as though the statement did not appear on the certificate.

I	(a)	Renal cell carcinoma	C64
	(b)	Primary site unknown	

Code renal cell carcinoma (C64) as though the statement "primary site unknown" was not on the certificate.

I	(a)	Reticulum cell sarcoma	C833
II		Undetermined source	

Code reticulum cell sarcoma (C833) as though the statement "undetermined source" was not on the certificate.

b. When primary site unknown or its equivalent appears on the certificate with a morphological type of neoplasm classifiable to C40, C41, C43, C44, C45, C46, C47, C49, C70, C71, and C72, add an additional code to identify the morphological type of neoplasm. Code the morphological type of neoplasm to the unspecified site category. This additional code should be entered on the same line with and preceding the code for the first mentioned secondary site.

I	(a)	Generalized metastases	C80		
	(b)	Melanoma of back	C439	C798	
	(c)	Primary site unknown			

Code I(b) melanoma, unspecified site, followed by the code for the secondary site reported.

c. When "primary site unknown," or its equivalent, appears on the certificate with neoplasms classified to morphological type C80, (classifiable to C00-C76), code all reported sites as secondary and precede the first neoplasm code with C80.

I	(a)	Secondary carcinoma of liver	C80	C787	
	(b)	Primary site unknown			

Code secondary liver carcinoma preceded with C80.

I	(a)	Carcinoma of stomach	C80	C788	
	(b)	Primary site unknown			

Code secondary stomach carcinoma preceded with C80.

I	(a)	Carcinoma of stomach	C80	C788	
	(b)	Primary site of carcinoma unknown	C80		

Code I(a) secondary carcinoma of stomach preceded with C80. Code I(b) C80 for carcinoma since the term carcinoma is repeated.

I	(a)	Cancer of intestines, stomach,	C80	C785	C788	C798
	(b)	and abdomen				
	(c)	Unknown primary				

Code all sites as secondary; precede the first code with C80.

10. Implication of malignancy

Mention on the certificate that a neoplasm has produced metastases (secondaries) means it must be coded as malignant, even though this neoplasm without mention of metastases would be classified to some other section of Chapter II.

Code neoplasms indexed to D00-D09 (in situ neoplasms), D10-D36 (benign neoplasms), or D37-D48 (neoplasms of uncertain or unknown behavior) to a primary malignant neoplasm category in C00-C76 if reported on the record with the following conditions:

a. Metastases NOS and metastases of a site

I (a) Breast tumor with metastases C509 C80

Code I(a) to primary malignant neoplasm of breast and code metastases NOS. Code breast tumor as malignant neoplasm of breast since it is reported with metastases NOS.

I (a) Brain metastasis C793
(b) Lung tumor C349

Code I(a) secondary neoplasm of brain and I(b) primary malignant neoplasm of lung since the lung tumor is reported with metastases of a site.

b. Any neoplasm indexed to C77-C79 in Volume III

I (a) Lymph node cancer C779
(b) Carcinoma in situ of breast C509

Code the carcinoma in situ of breast as primary malignant neoplasm of breast since it is reported with a neoplasm that is indexed to C779. Malignant neoplasm of lymph node is indexed to secondary neoplasm.

c. A common site of metastases (excluding lung) qualified by the word metastatic"

I (a) Metastatic liver cancer C787
(b) Small intestine tumor C179

Code I(a) as secondary neoplasm of liver and code primary malignant neoplasm of small intestine on I(b), since the small intestine tumor is reported with a common site of metastases qualified by the word "metastatic."

d. If a, b, or c do not apply, code the neoplasm in D00-D09, D10-D36, D37-D48 as indexed.

11. Sites with prefixes or imprecise definitions

Neoplasms of sites prefixed by "peri," "para," "supra," "infra," etc. or described as in the "area" or "region" of a site, unless these terms are specifically indexed, should be coded as follows: for morphological types classifiable to one of the categories C40, C41, C43, C44, C45, C46, C47, C49, C70, C71, and C72, code to the appropriate subdivision of that category; otherwise, code to the appropriate subdivision of C76 (other and ill-defined sites).

I (a) Fibrosarcoma in the region of the leg C492

Code I(a) fibrosarcoma in the region of the leg to the appropriate subdivision of the category, malignant neoplasm of connective and soft tissue of lower limb.

I (a) Carcinoma in lung area C761

Since the morphological type of the term "carcinoma" is C80, code I(a), carcinoma in lung area, to the appropriate subdivision of C76 (other and ill-defined sites).

12. Malignant neoplasms described with "either/or"

Malignant neoplasms of more than one site described as "or" and both sites are classified to the same anatomical system, code the residual category for the system. If the sites are in different systems, and are in the same morphological category, code to the residual category for the morphological type.

I (a) Cancer of kidney or bladder C689

Code C689, malignant neoplasm of other and unspecified urinary organs.

I (a) Cancer of gallbladder or kidney C80

Code to C80, malignant neoplasm without specification of site since there is more than one site qualified by the statement "or" and the sites are in different systems.

I (a) Osteosarcoma of lumbar vertebrae C419
(b) or sacrum

Code to malignant neoplasm of bone unspecified (C419). Both sites separated by the "or" are indexed to bone.

13. Mass or lesion with malignant neoplasms

When mass or lesion is reported with malignant neoplasms, code mass or lesion as indexed.

I (a) Lung mass R91
(b) Carcinomatosis C80

Code mass as indexed. Do not consider as malignant mass.

I (a) Metastatic lung carcinoma C349
II Lung lesion J984

Code lung lesion as indexed.

B. Rheumatic heart diseases

1. Heart diseases considered to be described as rheumatic

a. When rheumatic fever (I00) or any heart disease that is specified as rheumatic is reported anywhere on the death certificate, consider conditions listed in categories I300-I319, I339, I340-I38, I400-I409, I429, and I514-I519 to be described as rheumatic unless there is indication they were due to a nonrheumatic cause.

I	(a) Myocarditis	I090
	(b) Rheumatic heart disease	I099

Consider "myocarditis" to be described as "rheumatic" since reported with a heart disease specified as rheumatic.

I	(a) Cardiac tamponade	I092
	(b) Rheumatic endocarditis	I091
	(c)	

Consider "cardiac tamponade" to be described as "rheumatic" since reported with a heart disease specified as rheumatic.

b. When rheumatic fever and a heart disease are jointly reported, enter a separate code for the rheumatic fever only when it is not used to qualify a heart disease as rheumatic. This applies whether or not the heart disease is stated or classified as rheumatic.

I	(a) Heart disease	I099
	(b) Rheumatic fever	

Consider "heart disease" to be described as "rheumatic." Do not enter a separate code for rheumatic fever since it is used to qualify the heart disease as rheumatic.

I	(a) Rheumatic heart disease	I099
	(b) Rheumatic fever	

Code "rheumatic heart disease" as indexed. Do not enter a separate code for rheumatic fever since the heart disease is qualified as rheumatic.

I	(a) Cardiac arrest	I469
	(b) Rheumatic fever	I00

Cardiac arrest is not one of the conditions considered to be described as rheumatic when reported with rheumatic fever. Code each condition as indexed.

c. When a condition listed in category I50 is indicated to be due to rheumatic fever and there is no mention of another heart disease that is classifiable as rheumatic, consider the condition in I50 to be described as rheumatic.

I	(a)	Heart failure	I099
	(b)	Rheumatic fever	

Since there is no other heart disease classified as rheumatic, use the rheumatic fever to qualify the heart disease on I(a) as rheumatic.

I	(a)	Heart failure	I509
	(b)	Rheumatic heart disease	I099

Since there is a heart disease qualified as rheumatic reported on the record, code heart failure, I509.

2. Distinguishing between active and chronic rheumatic heart disease

Rheumatic heart diseases are classifiable to I010-I019, Rheumatic fever with heart involvement, or to I050-I099, Chronic rheumatic heart diseases, depending upon whether the rheumatic process was active or inactive at the time of death.

a. When rheumatic fever or any rheumatic heart disease is stated to be active, recurrent, or recrudescent, code all rheumatic heart diseases as active. Conversely, code all rheumatic heart diseases as inactive if rheumatic fever or any rheumatic heart disease is stated to be inactive.

I	(a)	Endocarditis	I011
	(b)	Active rheumatic fever	

Code I(a), active rheumatic endocarditis since the rheumatic fever is stated as active. Leave I(b) blank.

I	(a)	Heart failure	I509
	(b)	Inactive rheumatic heart disease	I099
	(c)		

Code I(a) as indexed since another heart classified as rheumatic is reported. Code I(b) as indexed since stated as inactive.

b. When there is no statement of active, recurrent, recrudescent, or inactive, code all heart diseases that are stated to be rheumatic or that are considered to be described as rheumatic as active if any of the following instructions apply:

(1) The interval between onset of rheumatic fever and death was less than one year.

I (a) Endocarditis - 6 months I011
(b) Rheumatic fever - 9 months

(2) One or more of these heart diseases (listed in Section IV, Part B, 1, a) is stated to be acute or subacute.

NOTE: This does not mean rheumatic fever stated to be acute or subacute.

I (a) Acute myocarditis I012
(b) Rheumatic heart disease I019

I (a) Rheumatic heart disease I099
(b) Acute rheumatic fever

(3) One of these heart diseases is pericarditis.

I (a) Pericarditis I010
(b) Rheumatic heart disease I019

(4) At least one of these heart diseases is "carditis," "endocarditis" (any valve), "heart disease," "myocarditis," or "pancarditis" with a stated duration of less than one year.

I (a) Endocarditis - 9 months I011
(b) Rheumatic heart disease I019

(5) At least one of these heart diseases is "carditis," "endocarditis" (any valve), "heart disease," "myocarditis," or "pancarditis" without a duration and the age of the decedent was less than 15 years.

Age: 10 years
I (a) Rheumatic heart disease I019
(b) Rheumatic fever

c. In the absence of the previous mentioned indications of an active rheumatic process, consider all heart diseases that are stated to be rheumatic or that are considered to be described as rheumatic as inactive and code to categories I050-I099.

Age: 75 years

I	(a)	Rheumatic heart disease	I099
	(b)	Rheumatic fever	

Code I(a) as indexed, there is no indication the rheumatic process was active. Leave line I(b) blank.

3. Valvular diseases jointly reported

a. When diseases of the mitral, aortic, and tricuspid valves, not qualified as rheumatic, are jointly reported, whether on the same line or on separate lines, code the disease of all valves as rheumatic unless there is indication to the contrary.

I	(a)	Mitral insufficiency and aortic stenosis	I051	I060
	(b)			

Code both valvular diseases as rheumatic since there is no indication to the contrary.

I	(a)	Aortic insufficiency	I061	
	(b)	Mitral endocarditis with	I059	I051
	(c)	mitral insufficiency		

Code the diseases of both valves as rheumatic since there is no indication to the contrary.

I	(a)	Mitral endocarditis c	I059	I051	I050
	(b)	insufficiency and stenosis			
	(c)	Aortic endocarditis	I069		

Code the diseases of both valves as rheumatic since there is no indication to the contrary.

I	(a)	Mitral valve disease	I059	I051	I48
	(b)	with insufficiency and			
	(c)	atrial fibrillation			
II		Aortic stenosis	I060		

Code the diseases of both valves as rheumatic since there is no indication to the contrary.

b. When mitral insufficiency, incompetence, or regurgitation is jointly reported with mitral stenosis NOS (or synonym), code all these conditions as rheumatic unless there are indications to the contrary.

I (a) Mitral insufficiency with mitral stenosis I051 I050

Code the mitral insufficiency as rheumatic since it is reported with mitral stenosis and there is no indication to the contrary.

4. Valvular diseases not indicated to be rheumatic

In the Classification, certain valvular diseases, i.e., disease of mitral valve (except insufficiency, incompetence, and regurgitation without stenosis) and disease of tricuspid valve are included in the rheumatic categories even though not indicated to be rheumatic. This classification is based on the assumption that the vast majority of such diseases were rheumatic in origin. Do not use these diseases to qualify other heart diseases as rheumatic. Code these diseases as nonrheumatic if reported due to one of the nonrheumatic causes on the following list.

I (a) Pericarditis I319
(b) Mitral stenosis I050

Although mitral stenosis is classified to a rheumatic category, do not use it to qualify the pericarditis as rheumatic.

a. When valvular heart disease (I050-I079, I089 and I090) <u>not</u> stated to be rheumatic is reported due to:

A1690	C73-C759	E802	J00
A188	C790-C791	E804-E806	J020
A38	C797-C798	E840-E859	J030
A399	C889	E880-E889	J040-J042
A500-A549	D300-D301	F110-F169	J069
B200-B24	D309	F180-F199	M100-M109
B376	D34-D359	I10-I139	M300-M359
B379	D440-D45	I250-I259	N000-N289
B560-B575	E02-E0390	I330-I38	N340-N399
B908	E050-E349	I424	Q200-Q289
B909	E65-E678	I511	Q870-Q999
B948	E760-E769	I514-I5150	R75
C64-C65	E790-E799	I700-I710	

Code nonrheumatic valvular disease (I340-I38) with appropriate fourth character.

I	(a)	Mitral stenosis and aortic stenosis	I342	I350
	(b)	Hypertension	I10	

<u>Code</u> I(a) as separate one-term entities to nonrheumatic mitral and aortic stenosis since they are reported “due to” a nonrheumatic condition.

I	(a)	Mitral insufficiency	I340	
	(b)	Goodpasture’s syndrome & RHD	M310	I099

<u>Code</u> I(a) to nonrheumatic mitral insufficiency since it is reported “due to” a nonrheumatic condition. Apply this instruction even though rheumatic heart disease is entered as the second entry on I(b).

b. Consider diseases of the aortic, mitral, and tricuspid valves to be nonrheumatic if they are reported on the same line due to a nonrheumatic cause in the previous list. Similarly, consider diseases of these three valves to be nonrheumatic if any of them are reported due to the other and that one, in turn, is reported due to a nonrheumatic cause in the previous list.

I	(a)	Mitral disease	I349
	(b)	Aortic stenosis	I350
	(c)	Arteriosclerosis	I709

Classify both valvular diseases as nonrheumatic. The mitral disease is reported due to the aortic disease which is, in turn, reported due to a nonrheumatic cause.

I	(a)	Congestive heart failure	I500
	(b)	Mitral stenosis	I342
	(c)	Arteriosclerosis	I709

Code the mitral stenosis as nonrheumatic since the certifier indicated it was due to a nonrheumatic cause.

I	(a)	Aortic and mitral insufficiency	I351	I340
	(b)	Subacute bacterial endocarditis	I330	

Code the valvular diseases as nonrheumatic since they are reported due to a nonrheumatic cause.

C. Pregnancy, childbirth, and the puerperium (O00-O99)

1. General information

Conditions classifiable to categories O00-O99 are limited to deaths of females of childbearing age. Some of the maternal conditions are also the cause of death in newborn infants. Always refer to the age and sex of the decedent before coding a condition to O00-O99.

Obstetric deaths are classified according to time elapsed between the obstetric event and the death of the woman:

O95 Obstetric death of unspecified cause
O96 Death from any obstetric cause occurring more than 42 days but less than one year after delivery
O97 Death from sequela of direct obstetric causes (death occurring one year or more after delivery)

The standard certificate of death contains a separate item regarding pregnancy. Any positive response to one of the following items should be taken into consideration when coding pregnancy related deaths:

☐ Pregnant at time of death

☐ Not pregnant, but pregnant within 42 days of death

☐ Not pregnant, but pregnant 43 days to 1 year before death

Consider the pregnancy to have terminated 42 days or less prior to death unless a specific length of time is written in by the certifier. Take into consideration the length of time elapsed between pregnancy and death if reported as more than 42 days.

Maternal deaths are subdivided into two groups:

Direct obstetric deaths (O00-O97): those resulting from obstetric complications of the pregnant state (pregnancy, labor and puerperium), from interventions, omissions, incorrect treatment, or from a chain of events resulting from any of the above.

Indirect obstetric deaths (O98-O99): those resulting from previous existing disease or disease that developed during pregnancy and which was not due to direct obstetric causes, but which was aggravated by physiologic effects of pregnancy.

When coding pregnancies, code any direct obstetric cause to O00-O97 and any indirect obstetric cause to O98-O99.

2. Pregnancy or childbirth without mention of complication

   a. Do not assign a separate code for "pregnancy" or "delivery" if any other condition is reported other than HIV infection (B200-B24) and/or nature of injuries and external causes (S000-Y899).

      When pregnancy or delivery is the only entry on the certificate. Apply the following instructions:

      (1) Code to category O95 if death occurred 42 days or less after termination of pregnancy or when there is no indication of when the pregnancy terminated.

          Female, 28 years
          I (a) Pregnancy O95

          Code "pregnancy" to Pregnancy, death from (O95) since it is the only entry on the certificate.

      (2) Code to category O96 if death resulted from direct or indirect obstetric causes that occurred more than 42 days but less than one year after termination of the pregnancy.

          Female, 28 years
          I (a) Childbirth 3 months O96

          Code childbirth to death from any obstetric cause occurring more than 42 days but less than one year after delivery.

      (3) Code to category O97 if death occurred 1 year or more after termination of pregnancy.

          Female, 28 years
          I (a) Pregnancy 1 year O97

          Code to death from sequela of a direct obstetric cause.

3. Pregnancy with abortive outcome (O000-O089)

   a. Code all complications of conditions listed in categories O000-O029 to the appropriate subcategory of O08 and also code O000-O029 as indexed. To determine the appropriate subcategory for O08, refer to the Index under Abortion, complicated by and select appropriate fourth character from last column.

      Female, 28 years

I	(a) Septicemia	O080
	(b) Tubal pregnancy	O001

      Code I(a) Abortion, complicated by, septicemia (O080) and I(b) Pregnancy, tubal (O001).

      Female, 20 years

I	(a) Shock	O083
	(b) Ectopic pregnancy	O009

      Code I(a) Abortion, complicated by, shock (O083) and I(b) Ectopic, pregnancy (O009).

   b. Code all complications of conditions listed in categories O03-O07 to the appropriate subcategory of O08 and also code O03-O07 with fourth character "9." To determine the appropriate subcategory for O08, refer to the Index under Abortion, complicated by and select appropriate fourth character from last column.

      Female, 22 years

I	(a) Pulmonary embolism	O082
	(b) Spontaneous abortion	O039

      Code I(a) Abortion, complicated by, pulmonary embolism (O082) and I(b) Abortion, spontaneous (O039).

c. When conditions in categories O00-O07 are reported in Part I or Part II of the death certificate with:

(1) a direct obstetric complication classifiable to category O08, code the complication to category O08 with the appropriate fourth character. Also code O00-O02 as indexed or O03-O07 with fourth character "9."

Female, 31 years

I	(a) Cardiac arrest	O088
	(b) Abortion	O069

Code I(a) Abortion, complicated by, cardiac arrest, a direct obstetric complication and I(b) Abortion NOS.

(2) an indirect obstetric complication classifiable to categories O98-O99, code the O98-O99. Also code the O00-O02 as indexed or O03-O07 with fourth character "9."

Female, 25 years

I	(a) Abortion	O069
II	Rheumatic heart disease	O994

Code I(a) Abortion NOS (O069). Code Pregnancy, complicated by rheumatic heart disease (O994), an indirect obstetric cause.

(3) both a direct and an indirect obstetric complication, code the direct complications to O08 with the appropriate fourth character and the indirect complications to O98-O99. Also code the O00-O02 as indexed or O03-O07 with fourth character "9."

Female, 33 years

I	(a) Renal failure	O084
	(b) Abortion	O069
II	Anemia	O990

Code I(a) Abortion, complicated by, renal failure. Direct complications of abortions are classified to category O08 with the appropriate fourth character. Code I(b) Abortion NOS. Code Part II Pregnancy, complicated by, anemia, an indirect obstetric complication.

4. Other complications of pregnancy, childbirth and puerperium (O00-O99)

   a. If death occurred more than 42 days but less than 1 year after termination of pregnancy, code all direct and indirect obstetric complications to O96.

      Female, 28 years
      I (a) Cardiomyopathy O96
      (b) Childbirth 3 months

      Code cardiomyopathy as a direct obstetric cause occurring more than 42 days but less than 1 year after childbirth.

      Female, 28 years
      I (a) Intracerebral hemorrhage O96
      (b) Childbirth 3 months

      Code intracerebral hemorrhage as an indirect obstetric cause occurring more than 42 days but less than 1 year after childbirth.

   b. If death occurred 1 year or more after termination of pregnancy, code any direct obstetric cause to category O97. If only indirect obstetric causes are reported, code all reported conditions as though the maternal condition had not been reported unless the maternal condition modifies the coding. In the latter case, take the maternal condition into account when assigning the code for the other reported condition, but **do not** code O00-O99.

      Female, 28 years
      I (a) Cardiomyopathy O97
      (b) Childbirth 1 year

      Code to O97, Death from sequela of direct obstetric causes. Cardiomyopathy is a direct obstetric cause. **Do not** enter a code on I(b) for childbirth.

      Female, 28 years
      I (a) Intracerebral hemorrhage I619
      (b) Childbirth 1 year

      Code to I619, the appropriate category outside Chapter XV. Intracerebral hemorrhage is an indirect obstetric cause. **Do not** enter a code on I(b) for childbirth.

c. Code all complications of pregnancy, childbirth, and the puerperium to categories O00-O75, O85-O92, O96-O99. When delivery is mentioned on the certificate, consider complications to be of delivery unless otherwise specified.

(1) When both direct and indirect obstetric causes are reported on the same certificate code as indexed to appropriate code in Chapter XV.

(2) When a complication is reported and not indexed to a direct or indirect obstetric code, assign the complication to O98-O99 with the appropriate fourth character. Refer to Volume I for correct code assignment.

Female, 35 years

I	(a) Thrombosis	1 hr	O229
	(b) Pregnancy	8 mos	
II	Obesity		O992

Code I(a) to Pregnancy, complicated by, thrombosis. Do not enter a code on I(b) for pregnancy. Code Part II to Pregnancy, complicated by, endocrine diseases NEC as indexed. Obesity is an endocrine disorder.

Female, 29 years

I	(a) Acute anemia	O990
	(b) Massive postpartum hemorrhage	O721
	(c) Delivered liveborn	

Code I(a) to Anemia, complicating pregnancy, childbirth or the puerperium, an indirect obstetric cause. Code I(b) to Hemorrhage, postpartum, a direct obstetric cause. **Do not** enter a code on I(c) for delivery NOS.

Female, 21 years

I	(a) Gram negative sepsis	O988
	(b) Congenital anomalies of ureters	O998
II	30 weeks pregnant	

Code I(a) to Pregnancy, complicated by, septicemia, an indirect obstetric cause. Code I(b) to Pregnancy, complicated by, congenital malformation, an indirect obstetric cause. **Do not** enter a code in Part II for pregnancy.

Female, 28 years

I	(a) Aspiration pneumonia	O995
	(b) Delivery	
II	Rubella in first trimester	O985

Code the indirect causes, aspiration pneumonia and rubella to the appropriate code in Chapter XV. Do not enter a code for delivery on I(b).

5. Delivery reported with anesthetic death or anesthesia

   a. When delivery (normal) NOS is reported with anesthetic death, code O748 only. When reported with anesthesia, code O749 only.

   Female, 29 years

I	(a) Anesthetic death	O748
	(b) Delivery	

   Code I(a) to O748, other complications of anesthesia during labor and delivery. Do not enter code on I(b) for delivery.

   b. When anesthetic death is reported with a complication(s) of delivery or puerperium, code O748 and the code(s) for complication(s) of pregnancy, delivery, or puerperium.

   Female, 26 years

I	(a) Anesthetic death	O748
	(b) Obstructed labor	O669

   Code Delivery, complicated by, anesthetic death on I(a). Code I(b) as indexed.

   c. When anesthesia is reported with a complication(s) of delivery or puerperium, code O749 and the code(s) for complication(s) of pregnancy, delivery, or the puerperium.

   Female, 28 years

I	(a) Prolonged labor	O639
	(b) Anesthesia - delivery	O749

   Code prolonged labor as a complication of delivery. Code "anesthesia-delivery" to O749.

Female, 34 years

I	(a) Cardiac arrest	O742
	(b) Anesthesia	O749
	(c) Obstructive labor	O669

Code I(a) cardiac arrest as a complication of anesthesia. Code the anesthesia on I(b) to O749. Code I(c) as indexed.

6. Operative delivery

   a. Code an operative delivery such as cesarean section or hysterectomy to O759.

   b. Code reported complications of the operative delivery to complications of obstetric surgery (O754).

   c. Code conditions reported due to complications of operative delivery as indexed under complication of delivery and/or the puerperium.

Female, 18 years

I	(a) Cardiac arrest	O742
	(b) Anesthesia during C-section	O749
	(c) Premature separation of placenta	O759
	(d)	O459

Code I(a) cardiac arrest as a complication of anesthesia. Code O749 for the anesthesia. There is no complication of the C-section; therefore, code the C- section to O759. Code premature separation of placenta as indexed on line (d).

Female, 27 years

I	(a) Pulmonary embolism	O882
	(b) Pelvic thrombosis	O754
	(c) C-section delivery	O759

Code I(a) Puerperal, embolism (pulmonary). Code I(b) as a complication of the operative delivery. Code I(c) Delivery, cesarean, as indexed.

Female, 39 years

I	(a) Pneumonia	O995
	(b) Peritoneal hemorrhage	O754
	(c) Cesarean section delivery	O759

Code I(a) O995, an indirect obstetric cause. Pneumonia is reported due to the complication and coded as complicating delivery. Code I(b) as a complication of the operative delivery. Code I(c) Delivery, cesarean, as indexed.

Female, 30 years

I	(a) Pneumonia	24 hr	O995
	(b) Pulmonary embolism	3 days	O754
II			O759

Operation Block: C-section

Code I(a) an indirect obstetric cause. Code I(b) as a complication of the operative delivery reported in Part II. Code Part II cesarean section as indexed.

Female, 28 years

I	(a) Pneumonia	O754	
	(b) C-section	O759	
II		O759	O321

Operation Block: C-section for breech presentation

Code I(a) as a complication of the operative delivery. Code cesarean section on I(b) as indexed. Code cesarean section and breech presentation as indexed in Part II.

7. Complicated delivery or abnormal delivery

Code complicated delivery NOS and abnormal delivery NOS to O759 when reported with or without specified complications.

Female, 19 years

I	(a) Complicated delivery	O759
	(b) Rheumatic heart disease	O994

Code I(a) to O759, complicated delivery NOS. Code the rheumatic heart disease on I(b) as an indirect obstetric cause (O994).

Female, 20 years

I	(a) Complicated delivery	O759
	(b) Placenta previa	O441

Code I(a) to O759, complicated delivery NOS. Code placenta previa on I(b) as indexed under Delivery, complicated by.

8. Ill-defined conditions reported with pregnancy, delivery or puerperium

If an ill-defined condition (I469, I959, I99, J960, J969, R00-R94) is not indexed as complicating pregnancy, delivery, or the puerperium, code:

O268 Other specified pregnancy-related conditions
O758 Other specified complications of labor and delivery
O908 Other complications of the puerperium, NEC

Female, 27 years

I	(a)	Respiratory failure	O758
	(b)	during delivery	

Code I(a) O758, Other specified complications of labor and delivery since respiratory failure complicating delivery is not indexed. No code for I(b).

D. Congenital Conditions

1. The Classification does not provide congenital and acquired codes for all conditions. When no provision is made for a distinction, disregard the statement of congenital or acquired and code the NOS code.

   Female, 45 years

I	(a)	Patent ductus arteriosus - acquired	Q250
	(b)	Pneumonia	J189

   Code I(a) to Q250 since patent ductus arteriosus does not have an acquired code.

   Male, 33 years

I	(a)	Gastric hemorrhage	K922
	(b)	Gastric ulcer - congenital	K259

   Code I(b) to K259 since gastric ulcer does not have a congenital code.

2. When a condition specified as "congenital" is reported "due to" another condition not specified as congenital, code both conditions as congenital.

   Male, 2 months

I	(a)	Peritonitis – birth	P781
	(b)	Intestinal obstruction	Q419

   Code the condition on I(b) as congenital.

3. Code hydrocephalus (G91.0, 1, 2, 8, 9) (any age) to Q039 (congenital hydrocephalus) when it is reported with another cerebral or other central nervous system condition (Q00-Q07, Q280-Q283) which is classified as congenital.

   Male, 3 months

I	(a)	Cerebral anoxia	G931
	(b)	Hydrocephalus & hypoplasia	Q039 Q061
	(c)	of spinal cord	

   Code hydrocephalus NOS to Q039 since the hypoplasia of spinal cord is classified as congenital.

Male, 3 months

I	(a) Cerebral anoxia	G931
	(b) Hydrocephalus	Q039
II	Meningomyelocele	Q059

Code the hydrocephalus NOS to Q039 since the meningomyelocele is classified as congenital.

E. Conditions of early infancy (P000-P969)

1. Assign newborn codes for conditions classifiable to A40-A41, I48-I50, J12-J189, J849, J984, J9840, J988, and K65.- whether or not indexed as newborn. Refer to Volume I for specific code assignment.

   Female, 20 days

I	(a)	Ventricular fibrillation	P291
	(b)	Staphylococcal pneumonia	P232

   Condition on I(a) must be coded to newborn code even though the Index does not provide a newborn code. Refer to Volume 1, Exclusion note under three character category for adult code, I49. Code neonatal cardiac dysrhythmias to P291. Condition on I(b) is also coded to the newborn code. Refer to Volume 1, Chapter XVI to determine correct code assignment.

2. When reported on certificate of infant, code the following entries as indicated:

Birth weight of:	2 pounds (999 gms) or under	P070
	Over 2 pounds (1000 gms) but not more than 5 ½ pounds (2499 gms)	P071
	10 pounds (4500 gms) or more	P080
Gestation of:	Less than 28 weeks	P072
	28 weeks but less than 27 weeks	P073
	42 or more completed weeks	P082

   Premature labor or delivery NOS P073

   Female, 3 hours

I	(a)	Respiratory distress syndrome	P220
	(b)	Prematurity	P073
II		26 weeks gestation	P072

   Code gestation, less than 28 weeks to P072.

   Male, 8 hours

I	(a)	Respiratory failure	P285	
	(b)	Prematurity, 23 weeks	P073	P072

   Code I(b) as two separate conditions. Code prematurity as indexed P073 and code P072 for "23 weeks." The 23 weeks is an implied length of gestation.

3. When a multiple birth or low birth weight is reported on an infant's death certificate outside of Part I or Part II, code this entity as the last entry in Part II.

	Male, 29 minutes - Twin A		
	I (a) Immature	P073	
	(b) Weight 1,500 grams - twin	P071	P015
	II Atelectasis	P281	P015

Code "twin" as the last entry in Part II.

	Male, 5 minutes		
4 lbs.	I (a) Immaturity of lung	P280	
	(b)		
	(c)		
	II	P071	

Code P071 for "4 lbs." as last entry in Part II.

4. When "termination of pregnancy" or "abortion" (legal) other than criminal is the only reported cause of an infant death, code P964. Do not code P964 if any other codable entry is reported.

Female, 3 minutes		
I (a) Legal abortion	P964	

Since "legal abortion" is the only entry on the certificate, code P964, as indexed.

F. Sequela

ICD-10 provides sequela codes for the following conditions:

B900-B909	Sequela of tuberculosis
B91	Sequela of acute poliomyelitis
B92	Sequela of leprosy
B940-B949	Sequela of other and unspecified infectious and parasitic diseases
E640-E649	Sequela of malnutrition and other nutritional deficiencies
E68	Sequela of hyperalimentation
G09	Sequela of inflammatory diseases of central nervous system
I690-I698	Sequela of cerebrovascular disease
O97	Death from sequela of direct obstetric causes
T900-T983*	Sequela of injuries, of poisoning, and of other consequences of external causes
Y850-Y859*	Sequela of transport accidents
Y86*	Sequela of other accidents
Y870-Y872*	Sequela of intentional self-harm, assault and events of undetermined intent
Y880-Y883*	Sequela with surgical and medical care as external cause
Y890-Y899*	Sequela of other external causes

* See **Section V, Part S** for instructions for coding sequela of injuries and external causes.

NOTE: When conditions in categories A00-B19, B25-B49, B58-B64, B99 are mentioned on the record with HIV (B20-B24, R75), do not consider the infectious or parasitic condition as a sequela.

When there is evidence death resulted from residual effects rather than the active phase of conditions for which the Classification provides a sequela code, code the appropriate sequela category. Code specified residual effects separately. Apply the following interpretations to the sequela categories.

1. B900-B909 Sequela of tuberculosis

   Use these subcategories for the classification of tuberculosis (conditions in A162-A199) if:

   a. A statement of a late effect or sequela of the tuberculosis is reported.

      I (a) Pulmonary fibrosis J841
        (b) Sequela of pulmonary tuberculosis B909

      Code sequela of pulmonary tuberculosis (B909) since "sequela of" is stated.

   b. The tuberculosis is stated to be ancient, arrested, cured, healed, history of, inactive, old, quiescent, or remote, whether or not the residual (late) effect is specified, unless there is evidence of active tuberculosis.

      I (a) Arrested pulmonary tuberculosis B909

      Code arrested pulmonary tuberculosis, B909, since there is no evidence of active tuberculosis.

   c. When there is evidence of active tuberculosis of a site with inactive (ancient, arrested, cured, healed, history of, old, quiescent, remote) tuberculosis of a **different** site, code both.

   d. When there is evidence of active and inactive (ancient, arrested, cured, healed, history of, old, quiescent, remote) tuberculosis of the **same** site, code active tuberculosis of the site only.

   e. Do not use duration to code sequela of tuberculosis.

      I (a) Respiratory failure J969
        (b) Pneumonia J189
        (c) Pulmonary tuberculosis 2 years A162

      Code pulmonary tuberculosis as active. Do not use duration of the tuberculosis to indicate sequela.

2. B91 Sequela of acute poliomyelitis

Use this category for the classification of poliomyelitis (conditions in A800-A809) if:

a. A statement of a late effect or sequela of acute poliomyelitis is reported.

I	(a)	Sequela of acute poliomyelitis	B91

Code sequela of acute poliomyelitis as indexed.

b. A chronic condition or a condition with a duration of one year or more that was due to the acute poliomyelitis is reported.

I	(a)	Paralysis - 1 year	G839
	(b)	Acute poliomyelitis	B91

Code sequela of acute poliomyelitis, since the paralysis has a duration of 1 year.

c. The poliomyelitis is stated to be history of, old, or the interval between onset of the poliomyelitis and death is indicated to be one year or more whether or not the residual (late) effect is specified.

I	(a)	Old polio	B91

Code old polio.

d. The poliomyelitis is not stated to be acute or active and the interval between the onset of the poliomyelitis and death is not reported.

I	(a)	Poliomyelitis	B91
	(b)		
	(c)		

I	(a)	ASHD	I251
	(b)		
	(c)		
II		Poliomyelitis	B91

I	(a)	Paralysis	G839
	(b)	Polio	B91
	(c)		

I	(a)	Poliomyelitis with	B91 G839
	(b)	paralysis	
	(c)		

3. B92 Sequela of leprosy

Use this category for the classification of leprosy (conditions in A30) if:

a. A statement of a late effect or sequela of the leprosy is reported.

b. A chronic condition or a condition with a duration of one year or more that was due to leprosy is reported.

4. B940 Sequela of trachoma

Use this subcategory for the classification of trachoma (conditions in A710-A719) if:

a. A statement of a late effect or sequela of the trachoma is reported.

I	(a)	Late effects of trachoma	B940

b. The trachoma is stated to be healed or inactive, whether or not the residual (late) effect is specified.

I	(a)	Healed trachoma	B940

c. A chronic condition such as blindness, cicatricial entropion or conjunctival scar that was due to the trachoma is reported unless there is evidence of active infection.

I	(a)	Conjunctival scar	H112
	(b)	Trachoma	B940

5. B941 Sequela of viral encephalitis

Use this subcategory for the classification of viral encephalitis (conditions in A830-A839, A840-A849, A850-A858, A86) if:

a. A statement of a late effect or sequela of the viral encephalitis is reported.

I (a) Late effects of viral encephalitis B941

Code sequela of viral encephalitis as indexed.

b. A chronic condition or a condition with a duration of one year or more that was due to the viral encephalitis is reported.

I (a) Chronic brain syndrome F069
(b) Viral encephalitis B941

Code sequela of viral encephalitis, since a resultant chronic condition is reported.

c. The viral encephalitis is stated to be ancient, history of, old, remote, or the interval between onset of the viral encephalitis and death is indicated to be one year or more whether or not the residual (late) effect is specified.

I (a) St. Louis encephalitis 1 yr B941

Code sequela of viral encephalitis, since a duration of 1 year is reported.

I (a) Old viral encephalitis B941

Code sequela of viral encephalitis, since it is stated "old."

d. Brain damage, cerebral fungus, CNS damage, epilepsy, hydrocephalus, mental retardation, paralysis (G810-G839) is reported due to the viral encephalitis.

I (a) Paralysis G839
(b) Viral encephalitis B941

Code sequela of viral encephalitis since paralysis is reported due to the viral encephalitis.

6. B942 Sequela of viral hepatitis

   Use this subcategory for the classification of viral hepatitis (conditions in B150-B199) if:

   a. A statement of a late effect or sequela of the viral hepatitis is reported.

   b. A chronic condition or a condition with a duration of one year or more that was due to viral hepatitis is reported.

7. B948 Sequela of other specified infectious and parasitic diseases
   B949 Sequela of unspecified infectious and parasitic diseases

   Use B948 for the classification of other and unspecified infectious and parasitic diseases (conditions in A000-A09, A200-A70, A740-A799, A810-A829, A870-B09, B250-B89) and

   Use B949 for the classification of only the terms "infectious disease NOS" and "parasitic disease NOS" if:

   a. A statement of a late effect or sequela of the infectious or parasitic disease is reported.

   b. The infectious or parasitic disease is stated to be ancient, arrested, cured, healed, history of, inactive, old, quiescent, or remote, whether or not the residual (late) effect is specified, unless there is evidence of activity of the disease.

   c. A chronic condition or a condition with a duration of one year or more that was due to the infectious or parasitic disease is reported.

I	(a) Reye's syndrome	1yr	G937
	(b) Chickenpox		B948
I	(a) Chronic brain syndrome		F069
	(b) Meningococcal encephalitis		B948

   d. There is indication the interval between onset of the infectious or parasitic disease and death was one year or more, whether or not the residual (late) effect is specified.

8. E640-E649 Sequela of malnutrition and other nutritional deficiencies

Use Sequela Code	**For Categories**
E640	E40-E46
E641	E500-E509
E642	E54
E643	E550-E559
E648	E51-E53 E56-E60 E610-E638
E649	E639

Use these subcategories for the classification of malnutrition and other nutritional deficiencies (conditions in E40-E639) if:

a. A statement of a late effect or sequela of malnutrition and other nutritional deficiencies (E40-E639) is reported.

I	(a)	Cardiac arrest		I469
	(b)	Sequela of malnutrition		E640

b. A chronic condition or a condition with a duration of one year or more is qualified as rachitic or that was due to rickets (E55.-) is reported.

I	(a)	Scoliosis	3 years	M419
	(b)	Rickets		E643

9. E68 Sequela of hyperalimentation

   Use this category for the classification of hyperalimentation (conditions in E67 and hyperalimentation NOS in R632) if:

   a. A statement of a late effect or sequela of the hyperalimentation is reported.

   b. A chronic condition or a condition with a duration of one year or more that was due to hyperalimentation is reported.

10. G09 Sequela of inflammatory diseases of central nervous system

    Use this category for the classification of intracranial abscess or pyogenic infection (conditions in G000-G009, G030-G049, G060-G069, G08) if:

    a. A statement of a late effect or sequela of the condition in G000-G009, G030-G049, G060-G069, G08 is reported.

    b. A chronic condition or a condition with a duration of one year or more that was due to the condition in G000-G009, G030-G049, G060-G069, G08 is reported.

    c. The condition in G000-G009, G030-G049, G060-G069, G08 is stated to be ancient, history of, old, remote, or the interval between onset of this condition and death is indicated to be one year or more, whether or not the residual (late) effect is specified.

    d. Brain damage, cerebral fungus, CNS damage, epilepsy, hydrocephalus, mental retardation, paralysis (G810-G839) is reported due to a condition in G000-G009, G030-G049, G060-G069, G08.

I	(a)	Hydrocephalus	G919
	(b)	Meningitis	G09

11. I690-I698 Sequela of cerebrovascular disease

Use this category for the classification of cerebrovascular disease (conditions in I600-I64, I670-I679) if:

a. A statement of a late effect or sequela of a cerebrovascular disease is reported.

I	(a)	Sequela of cerebral infarction		I693

Code sequela of cerebral infarction as indexed.

b. A chronic condition or a condition with a duration of one year or more that was due to one of these cerebrovascular diseases is reported.

I	(a)	Hemiplegia	1 year	G819
	(b)	Intracranial hemorrhage		I692

Code sequela of other nontraumatic intracranial hemorrhage since the residual effect (hemiplegia) has a duration of one year.

c. The condition in I600-I64 and I670-I679 is stated to be ancient, chronic, history of, old, remote, or the interval between onset of this condition and death is indicated to be one year or more, whether or not the residual (late) effect is specified.

I	(a)	Brain damage	G939
	(b)	Remote cerebral thrombosis	I693

Code sequela of cerebral thrombosis since the cerebral thrombosis is reported as remote.

I	(a)	Old intracerebral hemorrhage	I691

Code sequela of intracerebral hemorrhage since the intracerebral hemorrhage is stated as old.

I (a) Cerebral arteriosclerosis 6 yr I698

Code sequela of other and unspecified cerebrovascular disease since the cerebral arteriosclerosis has a duration of one year or more.

I (a) History of CVA I694

Code sequela of CVA since "history of" CVA is reported.

d. The condition in I600-I64, and I670-I679 is reported with paralysis (any) stated to be ancient, chronic, history of, old, remote, or the interval between onset of this condition and death is indicated to be one year or more whether or not the residual (late) effect is specified.

I (a) CVA with old hemiplegia I694 G819

Code sequela of CVA since it is reported with hemiplegia stated as old.

12. O97 Sequela of direct obstetric cause

Use this category for the classification of a direct obstetric cause (conditions in O00-O927) if:

a. A statement of a late effect or sequela of the direct obstetric cause is reported.

b. A chronic condition or a condition with a duration of one year or more that was due to the direct obstetric cause is reported.

G. Ill-Defined and unknown causes

1. Sudden infant death syndrome (R95)

Includes:

Cot death
Crib death
SDII, SID, SIDS, SUD, SUDI, SUID
Sudden (unexpected) (unattended) (unexplained)
- death (cause unknown) (in infancy) (syndrome)
- infant death (syndrome)

} Causing death at ages under 1 year

Excludes:

The listed conditions causing death at ages one year or over (R960)

Female, 6 months
I (a) Sudden death R95

Male, 3 weeks
I (a) Sudden death, cause unknown R95
(b) R97

Female, 3 months
I (a) SIDS, pneumonia R95 J189

2. Other sudden death and other unspecified cause (R960-R961, R98-R99)

Code R960-R961, R98-R99 only when:

a. A term(s) classifiable to one of these codes is the only entry (or entries) on the death certificate.

b. The only other entry on the death certificate is classifiable to R97 (cause unknown).

Female, 2 years
I (a) Sudden death R960
(b) Crib death R960

c. When more than one term classifiable to two or more of these categories is reported, code only one in this priority: R960, R961, R98, R99.

(1) Instantaneous death (R960)

Includes:
Cot death
Crib death
SDII, SID, SIDS, SUD, SUDI, SUID
Sudden (unexpected) (unattended) (unexplained)
- death (cause unknown) (in infancy) syndrome
- infant death (syndrome)

} Causing death at age 1 year or over

Excludes:
The listed conditions causing death at ages under one year (R95).

Male, 3 years

I	(a)	Sudden death, cause unknown	R960
	(b)		R97

Female, 2 years

I	(a)	SIDS, pneumonia	J189

(2) Death occurring in less than 24 hours from onset of symptoms, not otherwise explained (R961)

I	(a)	Died—no sign of disease	R961

(3) Unattended death (R98)

I	(a)	Found dead	R98
	(b)	Investigation pending	

I	(a)	Found dead at foot of steps	R98
	(b)	Natural causes	

(4) Ill-defined and unspecified cause of mortality (R99)

Includes:

Bone(s) found
Dead on arrival (DOA)
Diagnosis deferred
Died without doctor in attendance
Inquest pending
Natural cause(s)
No doctor
Pending examination (any type)
(pathological) (toxicological)
Pending investigation (police)
Skeleton
Undiagnosed disease

Excludes:

Unknown cause (R97)

I	(a)	DOA	R99
	(b)	Cause unknown	R97
I	(a)	No doctor	R99
	(b)	Pending investigation	R99
I	(a)	Cause unknown	R97
	(b)	Pending pathological examination	R99

3. Unknown cause (R97)

Includes:

Cause not found	No specific known causes
Cause unknown	Nonspecific causes
Cause undetermined	Not known
Could not be determined	Obscure etiology
Etiology never determined	Undetermined
Etiology not defined	Uncertain
Etiology unexplained	Unclear
Etiology unknown	Unexplained cause
Etiology undetermined	Unknown
Final event undetermined	Unspecified
Immediate cause not determined	? Cause
Immediate cause unknown	? Etiology
No specific etiology identified	

Use this category for the classification of the listed terms except when the term in R97 is reported on the same line with and preceding a condition qualified as "possible," "probably," etc. In such cases, no code should be entered for the term in R97.

I	(a)	G. I. hemorrhage	K922
	(b)	Cause unknown	R97
	(c)	Carcinomatosis	C80
I	(a)	Unknown cause	R97
I	(a)	Intestinal obstruction	K566
	(b)	Unknown, possibly cancer	C80
I	(a)	Amyloidosis	E859
	(b)	Chronic ulcerative colitis	K519
	(c)		
II		Cirrhosis of liver, cause unknown	K746 R97

If the term in R97 is reported in Part I on the same line with and following the condition to which it applies, enter the code for unknown cause on the next due to line whether or not "cause unknown" is in parentheses beside the condition in Volume 3. Code the conditions on each of the remaining lines in Part I, if there are any, as though they had been reported on the succeeding line(s).

Age 3 months

I	(a)	SIDS, cause unknown	R95
	(b)		R97
I	(a)	Natural causes, cause unknown	R99
	(b)		R97
I	(a)	Unknown cause	R97
	(b)	Found dead	R98
I	(a)	Unknown	R97
	(b)	Known to had ASHD	I251 J42
	(c)	and chronic bronchitis	
I	(a)	Gastric ulcer, cause unknown	K259
	(b)	Rheumatoid arthritis	R97
	(c)		M069

In ICD-10, the Nature of Injury Chapter (XIX) is part of the main Classification but certain effects of external causes are classified in Chapters I-XVIII. The external cause codes (Chapter XX) are intended for use, where relevant, to identify the external cause of conditions classifiable to Chapters I-XVIII, as well as to Chapter XIX. While not all external causes will have a corresponding code in Chapter XIX, an external cause code is required when a code from Chapter XIX is applicable.

A. External Cause Code (E-Code) Concept

An external cause of injury may be classified to Accidents (V01-X59), Intentional self harm (X60-X84), Assault (X85-Y09), Event of undetermined intent (Y10-Y34), Legal intervention and operations of war (Y35-Y36), Complications of medical and surgical care (Y40-Y84), and Sequela of external causes (Y85-Y89). When unspecified, assume all external cause one-term entities to be accidental unless the External Causes of Injury Index provides otherwise.

The objective in assigning the external cause codes is to combine into the entity being coded any related entries on the record that will permit the assignment of the most specific external cause codes in accordance with the intent of the certifier. After the determination of the most specific external cause code is made, enter this code where it is first encountered on the record. Do not repeat the same external cause code when it is reported on other lines. When more than one external cause is reported, code each external cause code where it is first encountered on the certificate.

The death certificate provides a specific place for information concerning the external cause of injury that is usually entered on the lines below the line labeled "Part II." However, a description of the external cause is reported frequently in Part I and may be repeated in the space provided for this information.

When such statements as: "jumped or fell," "don't know," "accident or suicide," "accident or homicide," "undetermined," or "open verdict" are reported, code the external cause as "undetermined." The "undetermined" categories include self-inflicted injuries, except poisoning, when not specified whether accidental or with intent to harm.

1. Use of Index

ICD-10 provides separate indexing in Volume 3, Section II for the external causes of injury, with frequent references to Volume 1. The External Causes of Injury Index provides a double axis of indexing — descriptions of the circumstances under which the accident or violence occurred and the agent involved in the occurrence. Usually, the "lead terms" in the External Causes of Injury Index describe the circumstances of the injury with a secondary (indented) entry naming the agent involved.

Fall from building W13

Locate the E-code for "fall":
Fall, falling
- from, off
- - building W13.-

Complications of medical and surgical care are indexed in Volume 3, Section II under:

Complication (delayed) (of or following) (medical or surgical procedure)

The Index may not include an entry for all surgeries that are reported on death certificates. A coder must do some research to determine the nature of the reported entry.

Pacemaker insertion Y831

Pacemaker is defined as "an electrical device functioning to stimulate and pace the heart." It is indexed under:

Complication (delay) (of or following) (medical or surgical procedure)
- implant, implantation (of)
- - artificial
- - - internal device (cardiac pacemaker) (electrodes in brain) (heart valve prosthesis) (orthopedic) Y83.1

When no additional information can be obtained, the suffix of the reported condition can be used as a guide for indicating the nature of the surgery:

ectomy	excision, surgical removal
opsy	to view
oscopy	inspection, looking into
ostomy	creation of an opening
otomy	incision into

2. Use of Tabular List

After locating the external cause code in the Index, always refer to Volume 1 since certain external cause codes for transport accidents require a fourth character not provided for in the Index. When ICD-10 provides a fourth character subcategory for an external cause code, always code the fourth character.

Fell from boat V929

Locate the E-code for "fall":
Fall
- from
- - boat, ship, watercraft NEC (with drowning or submersion) V92.-

In Volume 1, the fourth character describes the type of boat. Code the fourth character "9," unspecified watercraft.

The Classification provides a fourth character for use with categories W00-Y34, except Y06.- and Y07.-, to identify the place of occurrence of the external cause. NCHS uses a separate field for this purpose. Only the three-character category codes are assigned in multiple cause coding.

House fire X00

Locate the E-code for "House fire":
House Fire (uncontrolled) X00.-

In Volume 1, a fourth character identifying the place of occurrence is required. Assign code 0 (home) to the place of occurrence variable in the field provided for this variable.

3. Place of occurrence of external cause

Enter a one-character place of occurrence code (0-9), in the appropriate data position, for external causes of injury classifiable to W00-Y34, except Y06.- and Y07.-, **if** the effects of the external cause is classifiable to Chapter XIX. Do not enter a place code for external causes classifiable to any other external cause code. Use only the information reported in the medical certification section of the death certificate or additional information (AI) to determine the place code. Refer to Appendix D for the list of place of occurrence codes.

4. Manner of death (Item 37) on death certificate

a. Affecting multiple cause codes

(1) When separate check boxes for indicating whether an external cause was accidental, suicidal, homicidal, undetermined, or pending investigation appear on the medical certification form, treat any entry in the check box entry as a one-term entity.

(2) When "accident," "pending," "unknown," or "undetermined" is written in the "check box" or is one of the items checked and no condition is coded to Chapter XIX, disregard the check box entry for assignment of codes.

(3) When "unknown" or "open verdict" is written in the check box and there is a condition(s) coded to Chapter XIX, code the external cause to the appropriate "event of undetermined intent" category.

(4) When "pending," "pending investigation," "deferred," or "unclassified" is reported in the check box and there is a condition(s) coded to Chapter XIX, code as indexed.

(5) Enter a code for an entry in a check box for "natural cause" only if this is the only codable entry on the certificate or the only other codable entry is "unknown cause" (R97).

b. As a separate variable

Enter a one-character manner of death code (1-7) in the appropriate data position for any entry in the manner of death check box. Use only the information reported in the manner of death block to assign the code.

Code the manner of death as:

Accident 1
Suicide..... 2
Homicide 3
Deferred 4
Pending Investigation 4
Unclassified 4
Undetermined 5
Self Inflicted 6
Natural (causes)..... 7
Not stated ..... blank

5. Nature of injury and external cause code lists

Since certain entities state or imply cause (E-code) and effect (N-code), ICD-10 provides both N-codes and E-codes for many terms. Determination must be made whether to code nature of injury code only, external cause code only, or both nature of injury and external cause codes for such terms. Use the following lists as **guides** in classifying these terms. When ICD-10 provides a nature of injury code for an entity that does **not** appear on either list, use the nature of injury code only. (This instruction does not exclude the use of any nature of injury or external cause code when reported elsewhere on the certificate.)

Nature of injury code only (N-Code)

Allergy
Anaphylactic reaction
Anaphylactic shock
Anaphylaxic, anaphylaxis
Anoxia
Bezoar
Burns
Cremation
Crushed
Decapitation
Deceleration injury
Drug NOS or named drug (when it means drug poisoning)
Drug synergism
Exhaustion
Fracture
Inattention at birth
Incineration
Injury NOS (any site)
Intoxication (when due to a drug)
Lacerations
Lack of care
Mucus plug
Multiple injuries
Polypharmacy (when it means drug poisoning)
Scald
Severed
Smoke
Starvation
Trauma NOS (any site)
Traumatic
Traumatic death
Traumatic injury (any site)
Traumatism
Wound (penetrating)

External cause code only (E-code)

Abandonment
Accident, accidental
Arson
Assault
Beaten
Blow to any site
Blunt force NOS
Blunt impact NOS
Bullet (discharged) (fired)
Conflagration
Desertion
Excessive heat
Explosion
Explosive blasts to site(s)
Fall
Fight
Fire
Flood
Foreign body
Gun, pistol, rifle, shotgun
Gunshot
Gun went off
Heat
Hitting any site
Homicide, homicidal
Hot environment
Hot weather
Impact
Inhalation
Lightning (Struck by)
Physical violence
Projectile
Pulled trigger
Reaction of drug with a reported complication
.22, .32, or any caliber
Shooting, shot
Shotgun blast
Striking any site
Suicide, suicidal

Entities Requiring nature of injury and external cause codes on the same line (N\E Codes)

Airway obstruction by foreign body
Anastomotic leak
*Asphyxia
*Aspiration
Battered child (syndrome)
Bite
Blunt blow to a site
Blunt force injury (any site)
Blunt force to a site (any)
Blunt injury (any site)
Blunt trauma (any site)
Bullet wound
Child abuse
Child neglect
Choking on foreign body
Crushed by specified object
Cut
Drowning
Electrocution
Electrical burns
Electrical shock
Exposure (to element) (cold, heat)
Flame burn
Foreign body in any site
Freezing, froze, frostbite
Got too hot
Gunshot wound
Hanging (by neck)
Heat exhaustion
Heat stress
Heat stroke
Hypothermia
Immersion
Impact injury (any site)
Impact to a site (any)
Incised (wound)
Ingestion of foreign body
Inhalation injury (any)
*Inhalation of foreign body
Mangled
Mechanical trauma
Overdose (of drug)
Overheated
Overexertion
Poisoning (by substance)
Puncture, punctured (any site)
Puncture wound
Radiation burns
Rape
Razor cut
Slash, slashed (any site)
Smothered
Snake bite
Stab
Sting
Strangulation
Submersion
Suffocation
Sunstroke
Suspension, suspended
Swallowed object
Toxicity (of substance)
Vehicular trauma
Weapon wound

(* This does not apply when certain localized effects result from asphyxia, aspiration, or inhalation. Refer to Section V, Part O.)

B. Placement of nature of injury and external cause codes

When a nature of injury code and an external cause code are required for an entity, enter the nature of injury code followed by the external cause code on the same line.

Place	I	(a) Gunshot wound of chest	S219	&W34
9		(b)		
		(c)		
MOD	II			
1		Accident		

Since "gunshot wound" requires a nature of injury and an E-code, enter on I(a) the nature of injury code for open wound of chest followed by the most specific E-code for gunshot, accidental. Code place of occurrence as 9 (unspecified). Code manner of death as 1 (accident).

When entries requiring nature of injury codes and external cause codes are reported on the same line in Part I, code **the first nature of injury code** followed by the **most specific external cause code**; then code any remaining conditions for the line in the order indicated by the certifier.

Place	I	(a) Laceration of throat	S118			
9		(b) Dog bite of shoulder,	S410	&W54	T111	S119
		(c) arm and neck				

Code the nature of injury code only for I(a). On I(b), code the nature of injury code for "bite of shoulder" followed by the E-code for dog bite followed by the remaining nature of injury codes for "bite arm and neck." Code place of occurrence as 9 (unspecified).

Place	I	(a) Fracture skull	S029		
9		(b) Fell from window, crushed	S280	&W13	S381
		(c) chest and abdomen			

I(a) requires a nature of injury code only. I(b) requires both nature of injury and E-code since the external cause and injuries are reported on this line. Code first nature of injury code followed by the external cause code, followed by the remaining nature of injury codes. Code place of occurrence as 9 (unspecified).

Place	I	(a) Renal failure	N19			
0		(b) Injury kidney, liver and	S370	&W11	S361	S360
		(c) spleen. Fell from ladder at home				

Code I(b) injury kidney followed by external cause code for the fall, followed by the remaining injuries. Code place of occurrence as 0 (home).

Place	I (a) Cerebral laceration & contusion	S062	
9	(b) Blow to right temporal area	&X59	

Code I(a) to the nature of injury code only, and I(b) to the external cause code only. Code place of occurrence as 9 (unspecified).

In Part II, code each entry in the same order as entered on the certificate. For entities requiring both nature of injury and external cause codes, enter the nature of injury code followed by the external cause code. Enter the information recorded in the special spaces that have been provided on the medical certification form for recording information about external causes of injury following any codes that are applicable to Part II.

Place	I (a) Crushed chest	S280		
9	(b) Broken rib	S223		
	(c)			
	II Fracture hip and arm	S720	T10	&W24

43 | Run over by a forklift |

In Part II, code each entry in the order entered on the certificate. Code place of occurrence as 9 (unspecified).

Place	I (a) Subdural hematoma	S065	
9	II Blunt impact to head	S099	&Y00
MOD			
3	Homicide		

43 | Struck on head with a blunt object by another person |

Since the entry in Part II requires both nature of injury and external cause codes, enter the nature of injury code followed by the most specific external cause code. Code place of occurrence as 9 (unspecified).

Place	I (a) Head wound	S019		
9	II	&W34	S062	S019
MOD				
1	Accident			

43 | Cerebral laceration, GSW of head |

Code external cause code first in Part II since manner of death box requires an external cause code. Code place of occurrence as 9 (unspecified).

C. Use of ampersand

Use an ampersand to identify the following:

1. The most specific external cause code causing injuries or poisoning.

2. Certain localized effects of poisonous substances (X45-X49) or aspiration (W78, W79, W80) when classifiable to Chapters I-XVIII.

3. Ampersand the E-code for aspiration (W78-W80) anytime it is reported.

Place				
0	I	(a) Aspiration	T179	&W78
		(b) Vomitus		
	II	Fx Hip Fall at home	S720	&W19

Ampersand both the E-code for aspiration and the E-code for fall at home.

Exceptions to 3:

a. When reported **due to** nature of injury codes or other external causes.

b. When a nature of injury code other than T179 is reported as the **first** condition on the lowest used line in Part I.

Place			
0	I	(a) Aspiration of vomitus	T179 W78
		(b) Fx hip	S720
	II	Fall at home	&W19

Do not ampersand the E-code for aspiration since both Exception 3(a) and 3(b) apply.

In determining the most specific external cause code, consider all of the information reported on the record. If two or more external causes are reported and the nature of the injuries and/or the order in which the conditions are reported indicates that one of the external causes led to the condition that terminated in death, precede the code for this external cause by an ampersand. If no determination can be made, precede the code for the first mentioned external cause with an ampersand.

Place 9	I	(a)	Aspiration of vomitus	T179	W78
		(b)	Internal chest injury	S279	
		(c)	Fall down stairs	&W10	

The order in which the conditions are reported indicates that the fall down stairs led to aspiration; therefore, the ampersand precedes the code for this external cause.

Place 9	I	(a)	Gunshot wound of head	S019	&X95
		(b)	Stab wound of chest	S219	X99
MOD 3	II	Homicide			

The order in which the external causes are reported does not indicate which event occurred first; therefore, precede the code for the gunshot wound with an ampersand since it is the first external cause reported.

D. Certifications with mention of nature of injury and without mention of external cause

All certifications that have an entry classifiable to Chapter XIX must have an external cause code. When only one type of injury is reported without indication of the external cause and the External Cause Index provides a code for this type of injury, code accordingly. If the External Cause Index does not provide a code for the type of injury, code to Accident, unspecified (X59). When no external cause is reported and the external cause code must be assumed, code the external cause code as the last entry in Part II.

Place				
9	I	(a)	Crushed chest	S280
	II			&X59

Code Crushed (accidentally), X59 as indexed.

Place				
9	I	(a)	Fracture of hip and arm	S720 T10
	II			&X59

Code Fracture (circumstances unknown or unspecified), X59 as indexed.

Place				
9	I	(a)	Penetrating wound of abdomen	S318 S219
		(b)	and chest	
	II			&X59

Code Wound (accidental) NEC, X59 as indexed.

If different types of injuries are reported without indication of the external cause, use the injury reported in the lowest due to position to assign the appropriate external cause code for this injury. If more than one injury is reported on the lowest line, assign the appropriate external cause code for the first mentioned injury.

Place				
9	I	(a)	Brain injury	S069
		(b)	Fracture of skull	S029
	II			&X59

Code Fracture (circumstances unknown or unspecified), X59.

Place				
9	I	(a)	Fracture of hip	S720
		(b)	Crushing hip injury	S770
	II			&X59

Code Crushed (accidentally), X59.

Place 9	I	(a) Cerebral concussion and (b) laceration of brain	S060	S062
	II		&X59	

Concussion is not indexed in External Cause Index. Code to Accident, unspecified, X59.

These generalizations do not apply if the place of occurrence of the injury was highway, street, road, or alley. Refer to instructions for transport accidents in Section V, Part J.

Implied site of injury

Relate most injuries of an unspecified site to a condition of a specified site, whether or not qualified as generalized, multiple, or stated plural, following general instructions for relating disease conditions.

Exceptions:
Do not relate
Injury(ies) (generalized) (internal) (multiple)
Trauma(s) (generalized) (internal) (multiple)
Wound(s) (generalized) (internal) (multiple)

Place 9	I	(a) Crushed skull with multiple fractures	S071	S029
	II		&X59	

Code crushed skull followed by multiple skull fractures relating the injury of unspecified site to the site of the injury that is reported on the same line. Since there is no external cause reported, code Crushed (accidentally) as indexed in Part II.

Place 9	I	(a) Fractured neck and contusions	S129	S109
	II		&X59	

Code fractured neck followed by neck contusion relating the injury of unspecified site to the site of the injury that is reported on the same line. Since there is no external cause reported, code Fracture (circumstances unknown or unspecified) as indexed in Part II.

Place	I	(a) Fracture of hip	S720
9		(b) Crushing injury	S770
	II		&X59

Code crushing injury hip since there is only one site reported either on the line above or below the fracture. Since there is no external cause reported, code Crushed (accidentally) as indexed in Part II.

Place	I	(a) Fracture of skull with generalized trauma	S029 T07
9	II		&X59

Code the generalized trauma as indexed. Do not relate to the site of the injury reported on the same line with it. Since there is no external cause reported, code Fracture (circumstances unknown or unspecified) as indexed in Part II.

Place	I	(a) Skull fracture	S029
9		(b) Wound	T141
	II		&X59

Code I(b) to Wound, open as indexed. Do not relate to the site of the fracture reported on the upper line. Since there is no external cause reported, code Wound (accidental) NEC, X59 as indexed in Part II.

E. Conditions qualified as traumatic

1. Some conditions are indexed directly to a nontraumatic category but the Classification also provides a traumatic code. Consider these conditions to be traumatic and code as traumatic:

   a. When they are qualified as "traumatic"

   b. Or they are reported as **due to or with:**

   - Injury NOS
   - Trauma NOS
   - Any specified injury (injuries)
   - The **Manner of Death** is Accident, Homicide, Suicide, Pending Investigation or Undetermined.
   - An external cause

   Exception: **Do not** apply this instruction if the condition is reported due to a nontraumatic condition, the Manner of Death is Natural , or poisoning is reported.

Place 6	I	(a) Pneumothorax	S270
		(b) Fracture rib	S223
	II		&X59
		Place of injury- Factory	

Since pneumothorax is reported due to an injury, code pneumothorax as traumatic.

Place 9	I	(a) Cerebral hemorrhage	S062
		(b)	
		(c)	
MOD 1	II		&X59
		Accident	

Consider cerebral hemorrhage to be traumatic since Accident is reported in the Manner of Death block.

	I	(a) Cardiorespiratory failure	R092	
		(b) Intracerebral hemorrhage	I619	
		(c) Meningioma	D329	
MOD	II			
1		Accident		

Since intracerebral hemorrhage is reported due to a disease condition, code as nontraumatic. Do not enter an E-code for Accident reported in the check box since no condition is coded to Chapter XIX.

Place	I	(a) Subarachnoid Hemorrhage	I609	
9		(b) Fall	T149	&W19
MOD	II			
7		Natural		

Since Natural is reported in the Manner of Death block, code subarachnoid hemorrhage as nontraumatic.

Exceptions:

a. Code emphysema and meningitis to the nature of injury code only when they are stated to be "traumatic" or are reported **due to** or **on the same line with** an injury or external cause.

Place	I	(a) Emphysema	T797
9		(b) Injury chest	S299
		(c) Fall	&W19

Code I(a) Emphysema, traumatic since the condition is reported due to an injury.

Place	I	(a) Internal injury	T148
9		(b) Fall from ladder	&W11
	II	Meningitis	G039

Do not code the meningitis as traumatic since it is not reported due to or on the same line with an injury or external cause. Code place of occurrence as 9 (unspecified).

b. Code pneumonia (classifiable to J120-J168, J180-J189, J690, J698) or epilepsy (G400-G409) to the nature of injury code **only** when it is stated to be "traumatic."

Place				
9	I	(a)	Pneumonia	J189
		(b)	Fracture hip	S720
	II		Fall	&W19

Code I(a) pneumonia as indexed since it is not reported as traumatic.

Place				
9	I	(a)	Traumatic epilepsy	T905
		(b)	Head injury	T909
		(c)	Fall from ladder	&Y86

Code epilepsy to the nature of injury code since it is stated traumatic.

2. When a condition of a specified site is stated to be traumatic but there is no provision in the Classification for coding the condition as traumatic, code to injury unqualified of the site.

Place				
9	I	(a)	Traumatic cerebral thrombosis	S069
		(b)	Fall	&W19

Code Injury, cerebral.

3. When a condition that does not indicate a specified site is stated to be traumatic, but there is no provision in the Classification for coding the condition as traumatic, code trauma unspecified and the condition separately.

Place				
9	I	(a)	Traumatic coma	T149 R402
		(b)	Fall	&W19

Code trauma unspecified and coma separately.

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4. Traumatic hemorrhage (T148, T149)

Internal hemorrhage NOS	1	**Due to or on same line with** injury (any site)	Code the hemorrhage to T148, internal injury NOS
Hemorrhage NOS	2	**Due to** injury of a specified site	Relate the hemorrhage to the site of the specified injury
	3	**Due to** injury NOS or multiple injuries NOS	Code the hemorrhage to T149, injury NOS
	4	**Due to** injury of multiple specified sites	Relate the hemorrhage to site of the first mentioned specified injury
	5	**Due to** internal injury NOS or internal injuries NOS	Code the hemorrhage to T148, internal injury NOS
	6	**On same line with** injury of site	Relate the hemorrhage to the site of the specified injury
	7	**On same line with** injury of multiple specified sites	Code the hemorrhage to T149, injury NOS
	8	**On same line with** internal injury NOS or internal injuries NOS	Code the hemorrhage to T148, internal injury NOS
	9	**Due to and on same line with** injuries of different specified sites	Relate the hemorrhage to the site of the injury that is entered on the same line with hemorrhage

								Instruction Number
Place 9	I	(a) Internal hemorrhage	T148					
		(b) Crushed thorax	S280					1
		(c)						
	II		&X59					
Place 9	I	(a) Hemorrhage	S799					2
		(b) Fracture of femur	S729					
		(c)						
	II		&X59					
Place 9	I	(a) Hemorrhage	S299					2
		(b) Laceration of chest	S219					
		(c)						
	II		&X59					
Place 9	I	(a) Hemorrhage	T149					3
		(b) Multiple injuries	T07					
		(c)						
	II		&X59					
Place 9	I	(a) Hemorrhage	S299					4
		(b) Injury of chest, lung and	S299	S273	S223			
		(c) fractured rib						
	II		&X59					
Place 9	I	(a) Contusion chest with	S202	S299				6
		(b) hemorrhage						
		(c)						
	II		&X59					
Place 9	I	(a) Laceration of liver, lung,	S361	S273	S360	T149		7
		(b) & spleen with hemorrhage						
		(c)						
	II	Fracture rt. femur	S729	&X59				
Place 9	I	(a) Cerebral contusion	S062					9
		(b) with hemorrhage						
		(c) Injury of chest, lung, back	S299	S273	S399			
	II		&X59					

F. Assumption of nature of injury code

When a condition classifiable to Chapters I-XVIII, excluding J680-J709, is reported due to an external cause not considered to be medical or surgical care, code both a nature of injury code and an external cause code.

Place	I	(a)	Cardiac arrest	I469	
9		(b)	Shot in head	S019	&W34
Place	I	(a)	Respiratory failure	J969	
9		(b)	Fire	T300	&X09
Place	I	(a)	Heart failure	I509	
9		(b)	Machine overturned	T149	&W31
Place	I	(a)	Subarachnoid hemorrhage	I609	
9		(b)	Stroke	I64	
		(c)	Fall	T149	&W19

Do not code the hemorrhage on I(a) as traumatic since it is reported due to a nontraumatic condition.

Exceptions:

1. When conditions classified to categories A000-R99 are reported due to "second hand smoke," code the "second hand smoke" to X49.

I	(a)	Pulmonary emphysema	J439
	(b)	Second hand smoke	X49
I	(a)	Lung cancer	C349
	(b)	Second hand smoke	X49
I	(a)	Cardiac arrest	I469
	(b)	Second hand smoke	X49

2. Anthrax is reported with accident, suicide, homicide or undetermined

When anthrax (A220-A229) is reported with accident, suicide or homicide anywhere on the record (including in the check box) or undetermined in the check box only, code the anthrax as indexed and code the external cause code as:

- Accident specified (X58)
- Suicide specified (X83)
- Homicide specified (Y08)
- Undetermined specified (Y33)

Anthrax designated as an act of terrorism is classified to U016.

MOD				
3	I	(a)	Inhalation anthrax	A221
	II			Y08

Homicide

Code I(a) as indexed under Anthrax, inhalation. Code an E-code only in Part II for homicide based upon the check box entry. Also enter a code 3 for Homicide in the Manner of Death item.

I	(a)	Anthrax	A229
	(b)	Homicide	Y08

Code I(a) as indexed. Code an E-code only on I(b); do not assume an injury code.

3. External entry only

When an external cause is the only entry on the record, code the external cause code only.

I	(a)	Struck by falling tree	W20

G. Multiple injuries (T00-T07)

When injury (of a site) or specified type of injury (of a site) is:

Stated as	**Code as indexed under**
Bilateral	Injury (or specified type of injury), site, bilateral
Both	Injury (or specified type of injury), site, both
Multiple	Injury (or specified type of injury), site, multiple

Do not consider the plural form of injury or the plural form of a site to indicate multiple. Do not consider "right and left" as bilateral or both.

Examples of injuries:

1. Fracture of both hips T025

   Fracture
   - hip
   - - both T025

2. Fracture of hips S720

   Fracture
   - hip S720

3. Multiple fractures of ribs S224

   Fracture
   - rib
   - - multiple S224

4. Fractures of ribs S223

   Fracture
   - rib S223

5. Multiple wounds of lower limb T013

   Wound
   - limb
   - - lower NEC
   - - - multiple sites T013

Multiple injuries	**Followed by** specified type(s) of injuries	Code T07 and the specified injuries
Multiple injuries	**Followed by** specified site(s)	Code multiple injuries by site only
Single site	**Reported on same line with** multiple types of injuries	Code the specified types of injuries of the reported site

Place 9	I	(a) (b) (c)	Multiple injuries with fracture skull and laceration brain	T07 S029 S062
	II			&X59

Place 9	I	(a)	Multiple injuries - head, neck, chest	S097 S197 S297
	II			&X59

Place 9	I	(a) (b)	Fracture, laceration and contusion of leg	T12 T131 T130
		(c)	Fall from roof	&W13

H. Burns: Multiple degrees of burns/percentage of body surface burned

1. When multiple degrees of burns are reported, with or without mention of sites, code the most severe degree only.

Place 0	I	(a) 2nd and 3rd degree burns (b) of face, chest wall and abdomen (c)	T203 T213
MOD 1	II		&X00

Accident	home	house fire

Code 3rd degree burns of each site reported.

Place 9	I	(a) 2nd and 3rd degree burns (b) (c)	T303
	II		&X09

Code 3rd degree burns of unspecified body region.

2. When a percentage of burns or a percentage of body (entire, total) burns is reported, code to the percentage.

Place 9	I	(a) Burns of 50% of (b) body surface (c)	T315
MOD 1	II		&X06

Accident	clothing caught on fire

Code burns involving 50-59% of body surface.

3. When specified degrees of burns are reported with the percentage of body surface involved, code only the percentage of body surface involved.

Place 0	I	(a) 30-40%, 2nd and 3rd degree burns of body (b) (c)	T314
	II	House fire	&X00

Code burns involving 40-49% of body surface.

4. When a percentage of burns of specified sites is reported, code to burn of site(s) involved.

Place 8	I	(a) (b) (c)	Burns, 76% of face, anterior trunk, and extremities	T200 T210 T300
MOD 1	II			&X00 T300

Accident	burned in fire in abandoned shack

Code unspecified degree burns of each site reported. In Part II, code burned as burn of unspecified body region, unspecified degree.

I. Specified types of injuries

When specified types of injuries of sites are reported, code to site only. Do not use .8 indicating "specified NEC."

Place 9	I	(a)	Impact injury, upper arm Injury - arm NEC - - upper S499	S499	&X59
Place 9	I	(a)	Blunt injury, trunk Injury - trunk T099	T099	&X59

J. Transportation accidents (V01-V99)

The main axis of classification for land transports (V01-V89) is the victim's mode of transportation. The vehicle, which the injured person is an occupant, is identified in the first two characters since it is seen as the most important for prevention purposes.

Definitions and examples relating to transport accidents are in Volume 1, pages XX-9 - XX-17. Refer to these definitions when any means of transportation (aircraft and spacecraft, watercraft, motor vehicle, railway, other road vehicle) is involved in causing death.

For classification purposes, a motor vehicle not otherwise specified is **NOT** equivalent to a car. Motor vehicle accidents where the type of vehicle is unspecified are classified to V87-V89.

A vehicle not otherwise specified is **NOT** equivalent to a motor vehicle **unless** the accident occurred on the street, highway, etc. Vehicle accidents where the type of vehicle is unspecified are classified to V87-V89.

Additional information about type of transports are given below:

(1) Car (automobile) includes minivan, jeep, blazer, sport utility vehicle

(2) Pick-up truck or van includes ambulance, motor home, or truck

(3) Heavy transport vehicle includes armored car, dump truck, fire truck, panel truck, semi, tow truck, tractor trailer, 18-wheeler

(4) A special all-terrain vehicle (ATV) or motor vehicle designed primarily for off-road use includes snowmobile, go cart, dirt bike, race car, three-wheeler, four-wheeler, golf cart, dune buggy

(5) Motor vehicle includes passenger vehicle (private)

1. Use of the Index and Tabular List

The Classification provides a Table of land transport accidents in Volume 3, Section II. This table is referenced with any land transport accident if the mode of transport is known. Since the Index does not always provide a complete code, reference to Volume 1, Chapter XX is required.

For V01-V09, the fourth character indicates whether a pedestrian was injured in a nontraffic accident, traffic accident, or unspecified whether traffic or nontraffic accident.

For V10-V79, the fourth character represents the status of the victim, i.e., whether the decedent was driver, passenger, etc. For each means of transportation, there is a different set of fourth characters. Each means of transportation is preceded by its set of fourth characters in Volume 1.

Car overturned, killing driver V485

In the Index refer to:

Overturning
- transport vehicle NEC (see also Accident, transport) V89.9

Accident
- transport (involving injury to) (see also Table of land transport accidents) V99

In the Table of land transport accidents, select the intersection of:

Under **Victim and mode of transport,** select
Occupant of:
- car (automobile)

Under **In collision with or involved in:** select
Noncollision transport

The code is V48.-. From Volume 1 the fourth character is 5, driver injured in traffic accident.

Auto collision with animal V409

In the Index refer to:

Collision (accidental) NEC (see also Accident, transport) V89.9

Accident
- transport (involving injury to) (see also Table of land transport accidents) V99

In the Table of land transport accidents, select the intersection of:

Under **Victim and mode of transport,** select
Occupant of:
- car (automobile)

Under **In collision with or involved in**: select
Pedestrian or animal

The code is V40.-. From Volume 1, determine the fourth character is 9, unspecified car occupant injured in traffic accident.

2. Classifying accidents as traffic or nontraffic.

If an event is unspecified as to whether it is a traffic or nontraffic accident, it is assumed to be:

a. A traffic accident when the event is classifiable to categories V02-V04, V10-V82 and V87.

b. A nontraffic accident when the event is classifiable to categories V83-V86. These vehicles are designed primarily for off-road use.

c. Consider category V05 to be unspecified whether traffic or nontraffic if no place is indicated or if the place is railroad (tracks).

I (a) Laceration lung S273
(b)
(c) Accident &V575

MOD 1 II

Accident	Truck struck bridge	Driver

Code to occupant of pick-up truck or van injured in collision with fixed or stationary object, driver. When a motor vehicle strikes another vehicle or object, assume the collision occurred on the highway unless otherwise indicated.

I (a) Fractured skull S029
(b)

MOD 1 II &V866

Accident	Farm	Dune buggy overturned-passenger

Code to passenger of all-terrain or other off road motor vehicle injured in nontraffic accident.

I (a) Drowning T751 &V863

MOD 1 II

Accident	Snowmobile ran off road and went into pond

Code to unspecified occupant of all-terrain or other off road motor vehicle injured in traffic accident. Code as traffic accident since the accident originated on the road.

3. Status of victim

a. General coding instructions relating to transport accidents are in Volume 1, Chapter XX. Refer to these instructions for clarification of the status of the victim when not clearly stated.

I (a) Multiple internal injuries T065
(b) Crushed by car T147 &V031

Code to pedestrian injured in collision with car, pick-up truck or van, traffic. Refer to Volume 1, Chapter XX, instruction 3, Crushed by car. The victim is classified as a pedestrian. Refer to Table of land transports. Victim and mode of transport, pedestrian, in collision (with) car. Refer to Volume 1 for fourth character.

b. In classifying motor vehicle traffic accidents, a victim of less than 14 years of age is assumed to be a passenger provided there is evidence the decedent was an occupant of a motor vehicle. A statement such as "thrown from car," "fall from," "struck head on dashboard," "drowning," or "carbon monoxide poisoning" is sufficient.

Female, 4 years old

I	(a)	Fractured skull	S029
	(b)	Struck head on windshield when car	&V476
	(c)	struck tree felled across road	

Code to car occupant injured in collision with fixed or stationary object, passenger (V476).

4. Coding categories V01-V79

When drowning occurs as a result of a motor vehicle accident NOS, code as noncollision transport accident. The assumption is the motor vehicle ran off the highway into a body of water. If drowning results from a specified type of motor vehicle accident, code the appropriate E-code for the specified type of motor vehicle accident.

I (a) Drowning T751 &V589

MOD 1 II

Accident	Street	Truck accident

Refer to Table of land transports. Code to occupant of truck injured in noncollision transport accident, unspecified.

I (a) Drowning T751 &V435

MOD 1 II

Accident	Street	Driver-2 car collision

Refer to Table of land transports. Code to occupant of car injured in collision with car, driver.

5. Additional examples

I (a) Fractures of ribs S223
(b)
(c)
MOD 1 II &V234

Accident	Driver of motorcycle that collided with taxicab

Code to motorcycle rider injured in collision with car, pick-up truck or van, driver (V234).

I (a) Third degree burns T303
(b) Auto accident - car overturned &V489
(c)

Code to car occupant injured in noncollision transport accident, unspecified (V489).

I (a) Fracture of ribs S223
(b)
(c)
MOD 1 II &V892

Accident	Street	Vehicle Accident

Code to person injured in unspecified motor vehicle accident, traffic (V892). Code as motor vehicle accident since the accident occurred on the street.

6. Occupant of special all-terrain or other motor vehicle designed primarily for off-road use, injured in transport accident (V86)

This category includes accidents involving an occupant of any off-road vehicle. The fourth character indicates whether the decedent was injured in a nontraffic or traffic accident. Unless stated to the contrary, these accidents are assumed to be nontraffic.

I (a) Multiple injuries T07
(b) Driver of snowmobile that collided with auto &V860

Code to driver of all-terrain or other off-road motor vehicle injured in traffic accident since the collision occurred with an automobile.

I (a) Injuries of head S099
(b) Fracture both legs T025
(c) Driver of ATV &V865

Code to driver of all-terrain or other off-road motor vehicle injured in nontraffic accident.

I (a) Head injuries S099
(b) Overturning snowmobile &V869

Code to unspecified occupant of all-terrain or other off-road motor vehicle injured in nontraffic accident.

I (a) Fracture skull S029
(b) ATV accident &V869

Code to unspecified occupant of all-terrain or other off-road motor vehicle injured in nontraffic accident (V869)

7. Traffic accident of specified type but victim's mode of transport unknown (V87)
Nontraffic accident of specified type but victim's mode of transport unknown (V88)

a. If more than one type of vehicle is mentioned, do not make any assumptions as to which vehicle was occupied by the victim unless the vehicles are the same. Instead, code to the appropriate categories V87-V88. Statements such as these do not indicate status of victim.

Driver, car vs. truck	Car vs. truck-driver	Auto (passenger) vs. truck
Driver-car vs. truck	Car vs. truck, driver	Passenger car vs. truck

I (a) Intrathoracic injury S279
(b)
(c) Auto vs. motor bike accident &V870

Do not make any assumption as to which vehicle the victim was occupying. Using the Index, code:

Accident
- transport (involving injury to) (see also Table of land transport accidents) V99
- - person NEC (unknown means of transportation) (in) V99
- - - collision (between)
- - - - car (with)
- - - - - two- or three-wheeled motor vehicle (traffic) V87.0

I (a) Driver - collision of car and bus V873
(b)

Do not make any assumption as to which vehicle the victim was driving. Using the Index, code:

Accident
- transport (involving injury to) (see also Table of land transport accidents) V99
- - person NEC (unknown means of transportation) (in) V99
- - - collision (between)
- - - - car (with)
- - - - - bus V87.3

b. If reported types of vehicles are not indexed under Accident, transport, person, collision, code V877 for traffic and V887 for nontraffic.

I (a) Bus and pick-up truck collision, driver V877
(b)

Do not make any assumption as to which vehicle the victim was driving. Collision between bus and pick-up is not indexed under Accident, transport, person, collision. Code V877.

8. Water transport accidents (V90-V94)

The fourth character subdivision indicates the type of watercraft. Refer to Volume 1, Chapter XX, Water transport accidents for a list of the fourth character subdivisions.

I (a) Drowning T751 &V929
(b) Fell over-board

MOD II
1 Accident

Code drowning, due to fall overboard. Use fourth character "9," unspecified watercraft.

9. Air and space transport accidents (V95-V97)

For air and space transport accidents, the victim is only classified as an occupant. Military aircraft is coded to V958, Other aircraft accidents injuring occupant, since a military aircraft is not considered to be either a private aircraft or a commercial aircraft. Where death of military personnel is reported with no specification as to whether the airplane was a commercial or private craft, code V958.

10. Miscellaneous coding instructions (V01-V99)

a. When multiple deaths occur from the same transportation accident, all the certifications should be examined, and when appropriate, the information obtained from one may be applied to all. There may be other information available such as newspaper articles. A query should be sent to the certifier if necessary to obtain the information.

b. When classifying accidents which involve more than one kind of transport, use the following order of precedence:

aircraft and spacecraft (V95-V97)
watercraft (V90-V94)
other modes of transport (V01-V89, V98-V99)

I (a) Multiple fractures and internal injuries T029 T148
(b) Driver of car killed when a private plane &V973
(c) collided with car on highway after forced landing.

Code to person on ground injured in air transport accident following above order of precedence. Refer to Index under Accident, transport, aircraft, person, on ground.

c. When no external cause information is reported and the place of occurrence of the injury was highway, street, road, or alley, assign the external cause code to person injured in unspecified motor vehicle accident occurring on the highway.

I (a) Head injuries and fracture S099 S029
MOD II &V892
1

Accident	Highway

Code to person injured in unspecified motor vehicle accident, traffic since the accident occurred on the highway.

d. Homicide, suicide or undetermined in manner of death

(1) When "undetermined" is reported in the manner of death box with transport accidents, code the external cause as accidental unless a statement on the certificate **clearly establishes** an investigation has not determined whether accidental, homicidal, or suicidal.

	I	(a) Multiple head injuries	S097
		(b) Car ran off cliff	&V489
MOD 5	II	Undetermined	

Code I(a) as indexed. Code I(b) as unspecified car occupant injured in noncollision transport accident. Do not code to undetermined since there is no statement that clearly establishes an investigation resulted in an undetermined verdict.

Place 8	I	(a) Multiple head injuries	S097
		(b) Car ran off cliff	&Y32
MOD 5	II	Police report indicates possible suicide or accident. Verdict pending.	
		Undetermined	

Code I(a) as indexed. Code I(b) as indexed under Crash, transport vehicle, motor NEC, undetermined since there is a statement, which clearly establishes an investigation of "undetermined intent," is pending.

(2) When "homicide" is reported in the manner of death box with transport accidents, code the external cause as accidental unless a statement on the certificate **clearly establishes** an intentional act of homicide occurred.

Place 8	I	(a) Multiple traumatic injuries	T07
		(b) Decedent run over by vehicle several times in parking lot	&Y03
MOD 3	II	Homicide	

Code I(a) as indexed. Code I(b) as indexed under Assault, crashing of motor vehicle. Homicide is coded since there was evidence the victim was repeatedly run over.

I (a) Multiple traumatic injuries T07
(b) Struck by car while walking on side of road &V031

MOD II
3

Homicide	Hit and run	Driver left scene of accident

Code I(a) as indexed. Code pedestrian struck by car on I(b). Do not code as homicide since there is no statement of intentional homicide.

(3) When "suicide" is reported in the manner of death box with transport accidents, code the external cause qualified as suicide.

e. Garbage /dump truck accidents

When accidents involving garbage/dump trucks are reported and information indicates the mechanism of the body or truck bed caused the injuries, assign the E-code based on reported information. Usually, the statement of events will be falling on, struck by, or caught in and external codes W20, W22, or W23 will be used.

Place I (a) Crushed chest S280
4 (b) Dump truck body fell on chest &W20
MOD II
1

Accident	Street

Code external cause to struck (by), object, falling, W20.

Place I (a) Fracture skull S029
4 (b) Struck by dump truck body &W22
MOD II
1

Accident	Street

Code external cause to struck (by), object, W22.

Place I (a) Crushed chest S280
4 (b) Caught in compactor of garbage truck &W23
MOD II
1

Accident	Street

Code external cause to caught, between, objects, W23.

K. Falls

1. Other fall on same level (W18)

Code W18 if other or additional information is reported about the fall such as:

Fell from standing height
Fell striking head
Fell striking object
Fell to floor
Fell while walking
Lost balance and fell

Place	I (a) Fracture right hip	S720
0	II Lost balance and fell to floor	&W18
MOD 1	Accident / Home	

Code external cause to other fall same level.

2. Unspecified fall (W19)

Code W19, unspecified fall, for terms such as:

Fall
Fell
Fell at a place.

Place	I (a) Fracture right hip	S720
1	II Fell at nursing home	&W19
MOD 1	Accident / Nursing Home	

Code external cause to fall, unspecified.

L. Natural and environmental factors

1. Lightning

Code X33 only when the decedent is injured from direct contact with lightning.

Code injuries, such as stroke or shock, due to direct contact with lightning to T750.

Code burn(s) due to lightning to burn(s) (T200-T289, T300-T319).

Place 9	I	(a)	Shock	T750
		(b)	Struck by lightning	&X33

Place 0	I	(a)	Burns	T300
		(b)	House fire	&X00
		(c)	Struck by lightning	

When a secondary fire results from lightning, code to the fire. Do not enter a code for lightning.

2. Exposure (cold) and hypothermia

When exposure (cold) or hypothermia is reported anywhere on the record with another stated or implied external cause, code the nature of injury code (T68-T699, T758) and the E-code for the exposure (cold) or hypothermia (X31, X39). Do not modify the nature of injury code for exposure NOS. Ampersand the external cause code for the other event.

Place 9	I	(a)	Exposure	T758 X39
		(b)	Intoxication with hip fx	F100 S720
		(c)		
	II			&X59

Place 9	I	(a)	Hypothermia with drowning	T68 X31 T751 &W74
		(b)		
		(c)		

Place 4	I	(a)	Exposure	T758 X83
		(b)		
		(c)		
MOD 2	II		Multiple fractures	T029 &X80

Suicide	Jumped from bridge

Place 9	I	(a) Exposure to cold	T699	X31	
		(b)			
		(c)			
	II	MVA	&V892		
Place 9	I	(a) Exposure and hypothermia	T758	X31	T68
		(b) Unconsciousness	R402		
		(c)			
MOD 1	II	Blunt trauma to head	S099	&W18	T758

Accident	Exposed to elements after falling and striking head

M. Gunshot injury, gunshot wound

1. External cause code

The type of firearm involved in a death is identified at the three character level. Use the following guide to identify the type of firearm.

Type Firearm	Accidental	Intentional Self-harm	Assault	Undetermined Intent
Handgun 25 Caliber 32 Caliber 38 Caliber 45 Caliber 357 Magnum Pistol Revolver Saturday night special	W32	X72	X93	Y22
Rifle, shotgun, larger firearm 25.06 (25 ought 6) 30.6 (30 ought 6) 30/30 308 AK47 M1 (carbine) M14 M16 Machine gun Rifle (army) (hunting) (military) Shotgun (8, 10, 12, 16, 20, 410 gauge, buckshot)	W33	X73	X94	Y23
Other and unspecified firearms 22 Caliber gun 30 Caliber gun Airgun BB gun Pellet gun Pellet pistol Very pistol (Flare)	W34	X74	X95	Y24

2. Nature of injury code

When	**Is reported due to**	**Code**
Bullet injury wound (open) Gunshot injury wound (open)	"playing with gun" NOS or "cleaning gun" NOS	nature of injury to open wound (T141) and appropriate external cause code (W32-W34) (assume accident)
	"playing Russian roulette" (whether or not stated suicide)	nature of injury to open wound (T141) and code W32 (assume accident and handgun)
When	**Is reported due to**	**Code**
Injury NOS	bullet gun pistol rifle	nature of injury to open wound (T141) on upper line and appropriate external cause code (W32-W34) in "due to" position

Place 9	I	(a)	Injury	T141
		(b)	Rifle shot	&W33
Place 9	I	(a)	Gunshot injury chest	S219 &W34 S273
		(b)	and lung	
Place 9	I	(a)	Gunshot wound chest	S219 &W34
		(b)	Self-inflicted	
MOD 1	II		Accident	

	I	(a) Gunshot	W34		
Place 9	I	(a) Gunshot wound (b) Cleaning gun	T141	&W34	
Place 9	I	(a) Bullet entering chest & (b) exiting back	S219	&W34	S212
Place 9	I	(a) Open wound heart (b) Pistol	S269 &W32		
Place 9	I	(a) Gunshot wound femur	S711	&W34	

Code gunshot wound of bone to Wound, site of bone.

N. Child abuse, battering and other maltreatment (Y070-Y079)

Code to Child battering and other maltreatment (Y070-Y079) if the age of the decedent is under 18 years and the cause of death meets one of the following criteria:

1. The certifier specifies abuse, battering, beating, or other maltreatment, even if homicide is not specified.

Male, 3 years

I	(a)	Traumatic head injuries	S099
	(b)		
	(c)		
MOD	II		&Y079
3			

Homicide	Home	Deceased had been beaten

2. The certifier specifies homicide and injury or injuries with indication of more than one episode of injury, i.e., current injury coupled with old or healed injury consistent with a history of child abuse.

Male, 1-1/2 years

I	(a)	Anoxic encephalopathy	G931
	(b)	Subdural hematoma	S065
	(c)	Old and recent contusions of body	T910 T090
MOD	II		&Y079
3			

Homicide

3. The certifier specifies homicide and multiple injuries consistent with an assumption of battering or beating, if assault by a peer, intruder, or by someone unknown to the child cannot be reasonably inferred from the reported information.

Female, 1 year

	I	(a) Massive internal bleeding	T148	
		(b) Multiple internal injuries	T065	
		(c)		
MOD	II	Injury occurred by child being struck	T149	&Y079
3				

Homicide

Deaths at ages under 18 years for which the cause of death certification specifies homicide and an injury occurring as an isolated episode, with no indication of previous mistreatment, should not be classified to Y070-Y079. This excludes from Y070-Y079 deaths due to injuries specified to be the result of events such as shooting, stabbing, hanging, fighting, or involvement in robbery or other crime, because it cannot be assumed such injuries were inflicted simply in the course of punishment or cruel treatment.

Female, 1 year

Place	I	(a) Hypovolemic shock	T794	
0		(b) Perforating laceration of L. ventricle of heart	S268	
		(c) Multiple stab wounds thorax	S217	&X99
MOD	II	Stabbed with kitchen knife by mother	T141	
3				

Homicide | Home

O. Guides for differentiating between effects of external causes classifiable to Chapters I - XVIII and Chapter XIX

Categories in Chapters I-XVIII and in Chapter XIX are mutually exclusive. Where provision has been made for coding an effect of an external cause to Chapters I-XVIII, do not use a nature of injury code.

The effects of external causes classifiable to Chapters I-XVIII are primarily those attributable to drugs, medicaments and other biological substances properly administered in the correct dosage or therapeutic or other medical care purposes and to other forms of medical care, e.g., surgery and radiation. Refer to Section V, Part R.

A limited number of conditions attributable to other external causes, e.g., certain localized effects of fumes, vapors and nonmedicinal chemical substances and respiratory conditions attributable to aspiration of foreign substances, also are classified to Chapters I-XVIII. It is intended that Chapters I-XVIII be used to identify the complications and the substance be identified by the external cause code in Chapter XX.

To determine whether conditions that are indicated to be due to external causes, other than drugs, medicaments and other biological substances properly administered in correct dosage and radiation, are classifiable to Chapters I-XVIII or to Chapter XIX, look up the stated condition in the Index and scan the listings under this condition for qualifying terms that relate to the reported external cause. For example, to determine whether pneumonia due to aspiration of vomitus should be coded to Chapter X or to Chapter XIX, look up "Pneumonia, aspiration, due to, food (regurgitated), milk, vomit." This determination cannot be made by looking up "Aspiration." Where there is provision in the Index for coding a condition due to an external cause to Chapters I-XVIII, take the external cause into account if it modifies the coding.

I	(a) Pneumonia	&J690
	(b) Aspiration of vomitus	W78

Code Pneumonia, aspiration due to, vomit. Code "aspiration of vomitus" as an external cause code only.

I	(a) Pneumonia	&J690
	(b) Aspiration	W80
	(c) Cancer of lung	C349

Code Pneumonia, aspiration. Code I(b) "aspiration" as an external cause code only.

I	(a) Pneumonia	&J690
	(b) Asphyxia	W80
	(c) Aspiration	

Code Pneumonia, aspiration. Code I(b) external cause code only.

I	(a) Pneumonia	&J680
	(b) Smoke inhalation	X00
II	House fire	

Code Pneumonia, in (due to), fumes and vapors (J680). Code I(b) external cause code only.

I	(a) Acute pulmonary edema	&J681
	(b) Inhaled gasoline fumes	X46

Code Edema, pulmonary, acute, due to, chemicals fumes or vapors (J681). Code I(b) external cause code only.

Place			
9	I	(a) Pneumonia	J189
		(b) Cardiac arrest	I469
		(c) Aspiration of vomitus	T179 &W78

Code each entity as indexed. Do not code the pneumonia on I(a) due to aspiration of vomitus since it is reported due to another condition.

P. Threats to breathing

Certain effects of external causes can be classified to more than one nature of injury code depending on the type of external cause. Some of these effects are "anoxia," "asphyxia," "aspiration," "choking," "compression of neck," "obstruction of a site," "strangulation," "stricture of neck," and "suffocation."

The most frequently reported external causes which result in these effects are "aspiration, ingestion, and inhalation of objects and substances," "drowning," "fires," "fumes, gases and vapors," "hanging," "mechanical strangulation and suffocation" and "submersion."

Refer to the following pages containing tables that are to be used as guides in coding these types of external causes and effects.

In general, if the specific external cause is not in Tables 1-5, it will most likely be in Table 6, which contains the most frequently reported external causes which result in asphyxia, suffocation, etc. If not in any of the tables, code the effect as indexed.

Table	**Title**
Table 1	Drowning and submersion
Table 2	*Hanging and mechanical strangulation (by external means)
Table 3	Fires (includes burns, gases, fumes in association with burns and fires)
Table 4	Ingestion, inhalation of gases, fumes, vapors (without fires, burns)
Table 5	Compression chest, crushed chest by external means
Table 6	Aspiration NOS, ingestion NOS, inhalation NOS or aspiration, ingestion, inhalation of substances or objects (W78, W79, W80)

***NOTE:** Interpret mechanical strangulation as strangulation caused by external means to the exterior of the body.

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Table 1. Drowning and submersion

Instruction	When	Is reported due to	Code
1	anoxia asphyxia strangulation suffocation	drowning submersion	upper line T751 and the appropriate external cause code. lower line T751 only.

Instruction	When	Is reported on the same line with	Code
2	anoxia asphyxia strangulation suffocation	drowning submersion	T751 and the appropriate external cause code.

Table 1. Drowning and submersion

Examples					Corresponding Table and Instruction
Place 8 MOD 1	I	(a) Asphyxia (b) Drowning (c)	T751 T751	&W69	1.1
	II		T751		
		Accident	Drowned while swimming in river		
MOD 1	I	(a) Asphyxia (b) Strangulation (c) Drowning	T751 T751 T751	&V909	1.1
	II				
		Accident	Lake	Boat overturned	
Place 8 MOD 1	I	(a) Anoxia (b) Drowning (c)	T751 T751	&W70	1.1
	II				
		Accident	Fell into lake		
Place 9 MOD 1	I	(a) Drowning – asphyxia (b) (c)	T751	&W74	1.2
	II				
		Accident			

Table 2. Hanging and mechanical strangulation (by external means)

Instruction	When	Is reported due to or with	Code
1	asphyxia strangulation suffocation	hanging mechanical strangulation (by external means) compression of neck	upper line T71 and the appropriate external cause code. lower line T71 only.

Instruction	When	Is reported due to or with	Code
2	compression of neck stricture of neck	hanging mechanical strangulation (by external means) suffocation	upper line T71 only. lower line T71 and the appropriate external cause code.

Table 2. Hanging and mechanical strangulation (by external means)

Examples				Corresponding Table and Instruction
Place 0 MOD 2	I (a) Asphyxia (b) Hanging (c) II Suicide | Home	T71 T71	&X70	2.1
Place 9	I (a) Asphyxia (b) Suffocation (c) Crib sheet II	T71 T71	&W75	2.1
Place 0 MOD 2	I (a) Aspiration of vomitus (b) Strangulation (c) Hanging II Suicide | Home | Hanged self	T179 T71 T71 T71	W78 &X70	2.1
	I (a) Asphyxia (b) Compression of neck (c) Auto accident II	T71 T71	&V499	2.1

Place 9 MOD 3	I (a) Compression of neck (b) Hanging (c) II Homicide | Hanging	T71 T71 T71	&X91	2.2

Table 3. Fires (includes burns, gases, fumes in association with burns and fires)

Instruction	When	Is reported due to or with	Code
1	asphyxia suffocation	ingestion, inhalation of gas fumes, or vapors (carbon monoxide, products of combustion, smoke) with mention of a fire (specified)	the asphyxia, suffocation to the nature of injury code for the gas, fumes, vapor and the appropriate external cause code for the fire where required. lower line to the appropriate nature of injury code for the gas, fumes, vapor.

Instruction	When	Is reported due to	Code
2	asphyxia suffocation	burns NOS (any degree) (any percentage) (any site)	upper line T300 and the appropriate external cause code. lower line as indexed.

Instruction	When	Is reported due to	Code
3	asphyxia suffocation	fire NOS specified fire	upper line T300 and the appropriate external cause code. lower line blank.

Instruction	When	Is reported with	Code
4	asphyxia suffocation	fire NOS specified fire	the asphyxia, suffocation T300, followed by the appropriate external cause code for the fire.

Table 3. Fires (includes burns, gases, fumes in association with burns and fires)

Examples				Corresponding Table and Instruction
Place 0 MOD 1	I	(a) Suffocation	T599 &X00	3.1
		(b) Inhalation of products of combustion	T599	
		(c)		
	II		T599	
	Accident	Inhaled fumes in house fire		
Place 9 MOD 1	I	(a) Suffocation	T598 &X09	3.1
		(b) Smoke inhalation	T598	
		(c) Fire		
	II			
	Accident			
Place 0 MOD 1	I	(a) Asphyxia – carbon monoxide	T58 &X00	3.1
		(b)		
		(c)		
	II			
	Accident	Home	House fire	
Place 0 MOD 1	I	(a) Asphyxia	T300 &X04	3.2
		(b) Burns of chest and face	T210 T200	
		(c)		
	II			
	Accident	Home	Ignition of kerosene	
Place 9 MOD 1	I	(a) Suffocation	T300 &X00	3.2
		(b) 3º burns	T303	
		(c)		
	II			
	Accident	Burning Bldg.		
Place 0	I	(a) Asphyxia, fire in house	T300 &X00	3.4
		(b)		
		(c)		
	II			

Table 4. Ingestion, inhalation of gases, fumes, vapors (without fires, burns)

Instruction	When	Is reported due to	Code
1	asphyxia suffocation	ingestion, inhalation ⎫ of gas, fumes, or vapors	upper line to the appropriate nature of injury code for the gas, fumes, or vapor and the appropriate external cause code. lower line to the appropriate nature of injury code for the gas, fumes, or vapor.

Instruction	When	On the same line with	Code
2	asphyxia suffocation	ingestion, inhalation ⎫ of gas fumes, or vapors	the appropriate nature of injury code for the gas, fumes, or vapor and the appropriate external cause code.

Table 4. Ingestion, inhalation of gases, fumes, vapors (without fires, burns)

Examples					Corresponding Table and Instruction
Place 0 MOD 2	I	(a) Asphyxia (b) Inhalation of carbon monoxide (c) II	T58 T58 T58	&X67	4.1
Suicide	Home	Inhaled car exhaust fumes in garage			
Place 0 MOD 1	I	(a) Suffocation by inhalation (b) of propane gas (c) II	T598 T598	&X47	4.2
Accident	Home	Inhaled propane gas			

Table 5. Compression chest, crushed chest by external means

Instruction	When	Is reported due to	Code
1	asphyxia suffocation	crushed chest	upper line S280 plus the appropriate external cause code. lower line S280.

Instruction	When	Is reported due to	Code
2	asphyxia suffocation	compression chest	upper line S299 plus the appropriate external cause code. lower line S299.

Table 5. Compression chest, crushed chest by external means

Examples					Corresponding Table and Instruction
	I	(a) Asphyxia	S280	&V892	5.1
		(b) Crushed chest	S280		
MOD		(c) MVA			
1	II				
		Accident	Street	MVA	
Place	I	(a) Suffocation	S299	&W30	5.2
7		(b) Compression chest	S299		
MOD		(c) Tractor accident			
1	II				
		Accident	Farm	Tractor overturned on victim	

Table 6. Aspiration NOS, ingestion NOS, inhalation NOS, or aspiration, ingestion, inhalation of substances or objects (W78, W79, W80)

EXCLUDES: Ingestion, inhalation of drugs and poisonous substances

Instruction	When	Is reported due to	Code
1	asphyxia aspiration choking obstruction of a site occlusion of a site strangulation suffocation	aspiration NOS ingestion NOS inhalation NOS **or** aspiration, ingestion, inhalation of substances or objects	upper line to T17 plus appropriate fourth character and the appropriate external cause code (W78, W79, W80). lower line to T17 with appropriate fourth character.
2	asphyxia aspiration choking obstruction of a site occlusion of a site strangulation suffocation	foreign body in a site	upper line to T17 plus appropriate fourth character and the appropriate external cause code (W78, W79, W80). lower line to T17 with appropriate fourth character.
3	asphyxia aspiration choking obstruction of a site occlusion of a site strangulation suffocation	foreign body NOS	upper line to T17 plus appropriate fourth character and the appropriate external cause code (W78, W79, W80). lower line blank.

Table 6. Aspiration NOS, ingestion NOS, inhalation NOS, or aspiration, ingestion, inhalation of substances or objects (W78, W79, W80)

EXCLUDES: Ingestion, inhalation of drugs and poisonous substances

	Examples			Corresponding Table and Instruction
Place 9	I (a) Strangulation (b) Aspiration of food (c) II	T179 T179	&W79	6.1
Place 9	I (a) Obstruction of pharynx (b) Bolus of meat in throat (c) II	T172 T172	&W79	6.2
Place 9	I (a) Obstruction of trachea (b) Bolus of meat (c) II	T174	&W79	6.3
Place 9	I (a) Asphyxia (b) Aspiration (c) Vomitus II	T179 T179	&W78	6.3

Table 6. Aspiration NOS, ingestion NOS, inhalation NOS, or aspiration, ingestion, inhalation of substances or objects (W78, W79, W80)

EXCLUDES: Ingestion, inhalation of drugs and poisonous substances

Instruction	When	Is reported on the same line with	Code
4	asphyxia aspiration choking obstruction of a site occlusion of a site strangulation suffocation	aspiration NOS ingestion NOS inhalation NOS **or** aspiration, ingestion, inhalation of substances or objects	on the same line, T17 with appropriate fourth character and the appropriate external cause code (W78, W79, W80).
5	asphyxia aspiration choking obstruction of a site occlusion of a site strangulation suffocation	foreign body in a site	on the same line, T17 with appropriate fourth character and the appropriate external cause code (W78, W79, W80).
6	asphyxia aspiration choking obstruction of a site occlusion of a site strangulation suffocation	foreign body NOS	on the same line, T17 with appropriate fourth character and the appropriate external cause code (W78, W79, W80).

Table 6. Aspiration NOS, ingestion NOS, inhalation NOS, or aspiration, ingestion, inhalation of substances or objects (W78, W79, W80)

EXCLUDES: Ingestion, inhalation of drugs and poisonous substances

		Examples			**Corresponding Table and Instruction**
Place 9	I (a) (b) (c) II	Asphyxia by aspiration of vomitus	T179	&W78	6.4
Place 9	I (a) (b) (c) II	Choked by peanut obstructing trachea	T174	&W79	6.5
Place 9	I (a) (b) (c) II	Choked on chicken bone	T179	&W79	6.6

Table 6. Aspiration NOS, ingestion NOS, inhalation NOS, or aspiration, ingestion, inhalation of substances or objects (W78, W79, W80)

EXCLUDES: Ingestion, inhalation of drugs and poisonous substances

Instruction	When	Is reported due to	Code
7	aspiration NOS aspiration of substances strangulation NOS strangulation by substances	a disease	upper line T17 plus appropriate fourth character and the appropriate W78, W79, W80 if not previously coded. lower line as indexed.
8	aspiration NOS	vomiting	upper line T179, W78. lower line R11.
9	aspiration NOS ingestion NOS inhalation NOS or aspiration, ingestion, inhalation of substances or objects	injuries (other than those classified to T17-) and/or an external cause (other than W78, W79, W80)	upper line T17 plus appropriate fourth character. Also, code the appropriate W78, W79,W80 if not previously coded. lower line as indexed.

Table 6. Aspiration NOS, ingestion NOS, inhalation NOS, or aspiration, ingestion, inhalation of substances or objects (W78, W79, W80)

EXCLUDES: Ingestion, inhalation of drugs and poisonous substances

	Examples		**Corresponding Table and Instruction**
Place 9	I (a) Aspiration (b) C.V.A (c) II	T179 &W80 I64	6.7
Place 9	I (a) Aspiration (b) Vomiting (c) II	T179 &W78 R11	6.8
Place 9	I (a) Choked (b) Aspiration of blood (c) Crushed chest II Car vs. Ped	T179 W80 T179 S280 &V031	6.9
Place 9 MOD 1	I (a) Aspiration (b) Drowning (c) II Accident	T179 W80 T751 &W74	6.9

Q. Poisoning

When poisoning (any) is reported, code nature of injury code and external cause code for the substance.

When poisoning by fumes, gas, liquids, or solids is reported, refer to Index under "Poisoning (acute)" to determine the nature of injury code for the substance.

To determine the external cause code when a poisonous substance is ingested, inhaled, injected, or taken, refer to the description of such circumstances (acts) for example, Ingestion, Inhalation, or Took.

When a condition is reported due to poisoning and the Index provides a code for the condition qualified as "toxic," use this code. If the Index does not provide a code for the condition qualified as "toxic," code the condition as indexed.

1. Poisoning by substances other than drugs

Assume poisoning (self- inflicted) by a substance to be accidental unless otherwise indicated.

Place				
9	I	(a) Aplastic anemia	D612	
		(b) Benzene poisoning	T521	&X46

Code I(a) anemia, aplastic, toxic. Code I(b) to nature of injury and external cause code for benzene poisoning from Table of Drugs and Chemicals.

Place				
9	I	(a) Toxic poisoning	T659	&X46
		(b) Drank turpentine	T528	

Code I(a), nature of injury code for poison NOS and the most specific external cause code (turpentine) taking into account the entire certificate. Code nature of injury for turpentine on I(b).

a. Carbon monoxide poisoning

(1) Code carbon monoxide poisoning from motor vehicle exhaust gas to noncollision motor vehicle accident (traffic) according to type of motor vehicle involved unless there is indication the motor vehicle was not in transit. Consider statements of "sleeping in car," "sitting in car," or "in parked car" to indicate the motor vehicle was "not in transit." Assume "not in transit" in self-harm (intentional) and self-inflicted cases.

I	(a) Carbon monoxide poisoning	T58	&V892
	(b)		
	(c)		
II	Motor vehicle exhaust gas	T58	

In the Table of land transport accidents, select the intersection of:

Under **Victim and mode of transport,** select
Occupant of:
- motor vehicle (traffic)

Under **In collision with or involved in:** select
Noncollision transport V89.2

Code external cause code to person injured in unspecified motor vehicle accident, traffic.

Place				
	I	(a) Poisoned by carbon monoxide	T58	&X47
9	II	Sitting in parked car		

Code external cause code to carbon monoxide poisoning, which includes poisoning by gas, motor exhaust, not in transit.

(2) Consider carbon monoxide poisoning NOS to be motor vehicle exhaust gas when the place of injury is garage; code as "not in transit."

Place				
	I	(a) Carbon monoxide inhalation	T58	&X67
5	II	Found in garage. Suicide.		

Code external cause code to intentional self-harm by carbon monoxide poisoning, which includes poisoning by gas, motor exhaust, not in transit.

b. Inhalation and sniffing sprays and aerosol substances

When inhalation of sprays, aerosol substances, etc. is reported, code to the appropriate accidental poisoning category for the external cause.

Exceptions:

"Glue sniffing" and "cocaine sniffing" are indexed to mental and behavioral disorders due to psychoactive substance use (F182, F142).

Place	I	(a) Toxicity	T659	&X46
0		(b) Inhalation of aerosol substance	T659	
		(c)		
MOD	II	Breathed "PAM" (freon) in plastic bag	T535	
1		Accident / home		

Code I(a) the nature of injury code for toxicity as indexed. Code the external cause code to accidental inhalation of freon gas or spray (X46), the specific substance indicated by the certifier. Code nature of injury for aerosol on I(b) and for freon in Part II.

c. Intoxication by certain substances due to disease

When ammonia intoxication (NH_3) or carbon dioxide intoxication ($C0_2$) is reported due to a disease, **do not** code to poisoning. When due to a disease, code ammonia intoxication to R798 and carbon dioxide intoxication to R068.

I	(a)	Ammonia intoxication	R798
	(b)	Cirrhosis of liver	K746

Code I(a) as indexed, Intoxication, ammonia, due to disease (R798).

I	(a)	Carbon dioxide intoxication	R068
	(b)	Chronic pulmonary emphysema	J439

Code I(a) as indexed, Intoxication, carbon dioxide, due to disease (R068).

I	(a)	Toxic poisoning	R688
	(b)	Gastroenteritis	K529

Code I(a) as indexed, Poisoning, toxic, from a disease (R688).

d. Condition qualified as "toxic" with poisoning reported

(1) When a condition is qualified as "toxic" and there is indication of poisoning on the certificate, code the external cause code for the poisoning where the "toxic" is reported, followed by the condition code. If the Classification provides a code for the condition qualified as "toxic," use this code. If no provision is made for qualifying the condition as toxic, code to the unspecified code for the condition.

Place				
9	I	(a) Toxic nephritis	&X48	N144
	II	Organophosphate poisoning, accidental	T600	

Code most specific external cause code on I(a) where toxic is reported followed by condition code for toxic nephritis as indexed. Code nature of injury for organophosphate in Part II.

Place				
9	I	(a) Toxic GI hemorrhage	&X49	K922
		(b) Carbolic acid	T540	

Code most specific external cause code on I(a) where toxic is reported followed by condition code for GI hemorrhage as indexed. The Classification does not provide a code for GI hemorrhage qualified as toxic. Code nature of injury for carbolic acid on I(b).

Place				
9	I	(a) Toxic diarrhea	&X48	K521
	II	Rat poison	T604	

Code most specific external cause code on I(a) where toxic is reported followed by condition code for toxic diarrhea as indexed. Code nature of injury for rat poison in Part II.

(2) When a condition is qualified as "toxic" and there is no indication of poisoning on the certificate, code the condition as indexed to the unspecified code.

I	(a)	Toxic anemia	D612

Code toxic anemia as indexed since there is no indication of poisoning on the certificate.

2. Poisoning by drugs

a. When the following statements are reported, see Table of Drugs and Chemicals for the external cause code and code as accidental poisoning unless otherwise indicated.

Interpret all these statements to mean poisoning by drug:

Drug taken inadvertently
Overdose of drug
Poisoning by a drug
Toxic effects of a drug
Toxic reaction to a drug
Toxicity of a drug
Wrong dose taken accidentally
Wrong drug given in error

Place					
9	I	(a)	Cardiac arrest	I469	
		(b)	Digitalis toxicity	T460	&X44
		(c)	Congestive heart failure	I500	

Code digitalis toxicity to digitalis poisoning. Code nature of injury and external cause code for digitalis poisoning on I(b). Do not ampersand a disease condition when poisoning from a drug occurs while the drug is being administered for medical reasons.

Place					
9	I	(a)	Shock	R578	
		(b)	Insulin overdose	T383	&X44
		(c)	Diabetes	E149	

Code I(a) shock, toxic since reported due to poisoning. Code insulin overdose to insulin poisoning. Code nature of injury and external cause code for insulin poisoning on I(b). Do not ampersand a disease condition when poisoning from a drug occurs while the drug is being administered for medical reasons.

b. Interpret the term "intoxication by drug" to mean poisoning by drug unless indicated or stated to be due to drug therapy or as a result of treatment for a condition (refer to Section V, Part R, 1, (6), "Intoxication by drug" due to drug therapy).

Place			
9	I (a) Respiratory failure	J969	
	(b) Drug intoxication	T509	&X44
	II Ingested undetermined amount of drugs	T509	

Code "drug intoxication" to poisoning when there is no indication the drug was given for therapy. Code I(b) nature of injury and external cause code for drug poisoning. Code nature of injury code for drug NOS in Part II.

c. When poisoning by drug NOS is reported in Part I and a specified drug is reported in Part II, code the external cause code to the specified drug.

Place			
9	I (a) Took overdose of drug	T509	&X41
	II Overdose of barbiturates	T423	

Code "took overdose of drug" as accidental unless otherwise specified. Code I(a) nature of injury for drug NOS and external cause code to the specified drug reported in Part II. Code nature of injury for barbiturates in Part II.

d. When a condition is qualified as "toxic" or "drug induced" and there is indication of drug poisoning on the certificate, code the external cause code for the drug poisoning where the "toxic" or "drug induced" is reported, followed by the condition code. If the Classification provides a code for the condition qualified as "toxic" or "drug induced," use this code. If no provision is made for qualifying the condition as "toxic" or "drug induced," whichever applies, code to the unspecified code for the condition. Code the nature of injury code for poisoning by the specified drug.

Place				
9	I	(a) Toxic hemolytic anemia	&X41	D594
		(b) Levodopa toxicity	T428	

Code most specific external cause on I(a) where toxic is reported followed by condition code for toxic hemolytic anemia as indexed. Code nature of injury for levodopa on I(b).

When a condition is qualified as "toxic" and there is no indication of drug poisoning on the certificate, code the condition as indexed.

When a condition is qualified as "drug induced" and there is no mention of drug poisoning on the certificate, code as a complication of drug therapy (refer to Section V, Part R, 1, (5), "Drug induced" complications).

e. When combinations of drugs classifiable to categories X40-X44 are reported, code the external cause code as follows:

(1) When accidental poisoning from a single drug is reported in Part I with a combination of drugs in Part II, code the external cause code for the drug reported in Part I. Code the nature of injury codes for each drug reported.

Place				
9	I	(a) Acute barbiturate intoxication	T423	&X41
	II	Took unknown amount of barbiturates and aspirin	T423	T390
MOD 1		Accident		

Code external cause code to X41, accidental poisoning by barbiturates, the single drug reported in Part I. Code nature of injury for barbiturates on I(a) and for barbiturates and aspirin in Part II.

(2) When accidental poisoning by a combination of drugs classifiable to different external cause codes is reported and (1) does not apply, code the external cause code to X44, Accidental poisoning and exposure to other and unspecified drugs, medicaments, and biological substances. Code the nature of injury for each drug reported.

Place	I	(a)	Drug intoxication	T509	&X44
9		(b)	Digitalis, cocaine	T460	T405

The external cause code for accidental poisoning by digitalis is X44 and for cocaine is X42. Since the drugs are assigned to different external cause codes, code X44, Accidental poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances. Code nature of injury for each drug reported.

(3) When poisoning by a combination of drugs is stated or indicated to be intentional self harm (suicide) or undetermined, proceed as follows:

(a) Determine the external cause code for the drugs from the Table of Drugs and Chemicals, Volume 3. If the combination is classifiable to different external cause codes assign the external cause code to X64 (Intentional self harm) or Y14 (Undetermined).

Place	I	(a)	Drug toxicity	T509	&X64
9		(b)	Overdose of salicylates and seconal	T390	T423
MOD	II		Overdose of drugs	T509	
2			Suicide		

The external cause code for intentional self harm (suicide) by salicylates is X60 and for seconal, X61. Since the drugs are assigned to different external cause codes, code X64, Intentional self poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances. Code nature of injury for each drug reported.

Place 9	I (a) Darvon and promazine	T404	&Y14	T433
	(b) intoxication			
MOD 5	II Drug intoxication	T509		
	Undetermined			

The external cause code for poisoning of undetermined intent by darvon is Y12 and for promazine, Y11. Since the drugs are assigned to different external cause codes, code Y14, Poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances, undetermined intent. Code nature of injury for each drug reported.

3. Percentage of drug(s) in blood

When a percentage (%) of any drug(s) in the blood is reported, code the nature of injury code for the drug if there is mention of drug poisoning elsewhere on the record.

When a complication is reported due to a percentage (%) of any drug(s), code as a complication of drug therapy unless otherwise indicated.

When a percentage (%) of any drug(s) in the blood is reported without mention of drug poisoning or a complication, do not enter a code for the drug.

Place 9	I (a) Gunshot wound brain	S069	&X74
	II .05 mg. barbiturates in blood		
MOD 2	Suicide		

Since there is no mention of poisoning or a complication of the barbiturates, **do not** enter a code for the percentage of drug in the blood.

4. Poisoning by alcohol and drugs

When alcoholism or alcohol poisoning (any F10-, R780, R826, R893, T510-T519) is reported in Part I with drug poisoning in Part I, code the alcohol to the appropriate code (F10-, R780, R826, R893, T510-T519), the nature of injury code for the drug and code the appropriate external cause code for the drug preceded by an ampersand. If alcohol poisoning is reported, code the external cause code for alcohol also but do not precede this code with an ampersand. Interpret the following statements to mean poisoning by alcohol and drugs and code the appropriate E-code for alcohol poisoning:

Alcohol and drug interaction
Alcohol and drug synergism
Combination of alcohol and drugs
Combined action alcohol and drugs
Combined alcohol and drug intoxication
Combined effects of alcohol and drugs
Combined overdose of alcohol and drugs
Ingestion of combined overdose of alcohol and drugs
Mixed alcohol and drug intoxication
Mixed effects of alcohol and drugs
Mixed overdose alcohol and drugs
Synergistic effects of alcohol and drugs

Place 9	I	(a) Combined effects of alcohol and drugs	T519	X45	T509	&X44
MOD 1	II	Ingested alcohol and drugs	T519	T509		
		Accident				

Interpret I(a) as poisoning and code the nature of injury and external cause code for alcohol and drugs. Precede the E-code for drugs with an ampersand.

Place 9	I	(a) Alcohol intoxication	F100	
		(b) Barbiturate intoxication	T423	&X41

Code I(a) alcohol intoxication as indexed and code the nature of injury and external cause code for barbiturate intoxication on I(b).

Place	I (a) Alcoholism	F102	
9	II Alcohol and barbiturate	F100 T423	&X41
MOD	intoxication		
1			

Accident

Code alcoholism as indexed in Part I. Code Part II alcohol intoxication as indexed and the nature of injury and external cause code for barbiturate intoxication.

Place	I (a) Barbiturate toxicity	T423	&X61
9	II Barbiturate and	T423	F100
MOD	alcohol intoxication		
2			

Suicide

Code I(a) nature of injury for barbiturate T423 and external cause code X61 for suicidal barbiturate toxicity. Code Part II, nature of injury for barbiturates and alcohol intoxication as indexed.

5. Intoxication (acute) NOS due to specified substances

When intoxication (acute) NOS is reported "due to" drugs or poisonous substances, code the intoxication to the nature of injury code for the first substance reported in the "due to" position.

Exception:

Intoxication (acute) NOS "due to" drug(s) with indication the drug was being given for therapy.

Place	I	(a)	Acute intoxication	T404			
9		(b)	Darvon & alcohol poisoning	T404	&X62	T519	X65
MOD	II						
2		Suicide					

Code I(a) T404, the nature of injury code for darvon since this is the first substance reported in the "due to" position. Code I(b) to the nature of injury and external cause code for darvon poisoning and alcohol poisoning. Precede the external cause code for darvon poisoning with an ampersand. Do not ampersand external cause code for alcohol poisoning.

Place	I	(a)	Intoxication	T58	
9		(b)	Carbon monoxide inhalation	T58	&X47
MOD	II				
1		Accident			

Code I(a) T58, the nature of injury for the substance (carbon monoxide) reported in "due to" position. Code I(b) to the nature of injury and external cause code for carbon monoxide inhalation. Precede the external cause code with an ampersand.

NOTE: See Appendix H for additional drug examples.

R. Complications of medical and surgical care (Y40-Y84)

Code any complication, abnormal reaction, misadventure to patient, or other adverse effect that occurred as a result of or during medical care except obstetrical procedures to the appropriate category in Chapters I-XIX but take into account the medical care if it modifies the code assignment. Assign the appropriate external cause (E-code) pertaining to the medical care regardless of whether the complication is classified to Chapters I-XVIII or to Chapter XIX.

The E-code distinguishes between:

1. Drugs, medicaments and biological substances causing adverse effects in therapeutic use (Y40-Y59).

2. Misadventures to patients during surgical and medical care (Y60-Y69).

3. Surgical and other medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure (Y83-Y84).

Use of ampersand (More than one instruction may apply)

1. Always precede the condition that necessitated the medical or surgical care with an ampersand the first time it is reported. Generally the first condition on the lowest used line will be the reason for medical care.

I	(a)	Pneumonia	J958
	(b)	Surgery	Y839
	(c)	Pulmonary hemorrhage	R048
	(d)	Lung cancer	&C349

2. Precede the external cause (Y40-Y84) with an ampersand **if the complication** is classified to Chapter XIX (T80-T88).

I	(a)	Pulmonary embolism	T817
	(b)	Surgery	&Y839

3. Precede the complication with an ampersand **if the complication** is classified to Chapter I-XVIII and the condition requiring medical or surgical care is **NOT** reported.

I	(a)	Renal failure	&N19
	(b)	Drug therapy	Y579

4. If the medical or surgical care was administered for an injury, precede the code for the external cause of the injury with an ampersand.

	I (a)	Pneumonia	J958
Place	(b)	Surgery	Y839
9	(c)	Fracture of hip	S720
	(d)	Fall	&W19

5. If two or more conditions for which the medical or surgical care could be administered is reported and the reason for treatment cannot be determined, precede the first condition with an ampersand.

I	(a)	Pneumonia	J958	
	(b)	Surgery	Y839	
II		Lung cancer, gastric ulcer	&C349	K259

6. If the medical care was administered for diagnostic purposes, precede the code for the condition that was found or confirmed by the diagnostic finding with an ampersand the first time it is reported.

I	(a)	Cerebral edema	G978
	(b)	Cerebral arteriogram	Y848
	(c)	Brain tumor	&D432

1. Drugs, medicaments and biological substances causing adverse effects in therapeutic use (Y40-Y59)

   a. Complications of drugs

   Although almost any condition reported due to drug therapy is regarded as a complication, there are a few diseases that are not considered complications. The drug therapy is not coded when there is no evidence of a complication.

   (1) The following are not regarded as complications of drug therapy.

   (a) These conditions due to drug therapy:

Infectious and parasitic diseases	A000-A309, A320-A329, A360-A399, A420-A449, A481-A488, A500-A690, A692-B199, B250-B349, B500-B942, B949 (**EXCEPT:** Antineoplastic drugs Y431-Y433; Immunosuppressive agents Y434) B200-B24
Neoplasms	C000-D489
Diabetes	E10-E14 (**EXCEPT:** Steroids Y425, Y427)
Hemophilia	D66, D67, D680, D681, D682
Alcoholic disorders	E244, F100-F109, G312, I426, K292, K700-K709, K860, L278, R780, R826, R893 G621, G721 (**EXCEPT:** Alcohol deterrents Y573)
Rheumatic fever or rheumatic heart disease	I00-I099
Arteriosclerosis and arteriosclerotic conditions	
Influenza	J100-J118

Hernia	K400-K469
Congenital malformations	Q000-Q999

This is not an all inclusive list.

I (a) Lung cancer C349
(b) Drug therapy

Since lung cancer is not considered a complication of drug therapy, no code is assigned for I(b).

(b) Any condition stated as congenital, familial, hereditary, idiopathic or conditions with a duration that predates the drug therapy.

I (a) Congenital cardiomyopathy I424
(b) Drug therapy

Do not code the drug therapy since conditions stated as congenital cannot be considered as complications.

I (a) Nephritis 6 months N059
(b) Drug therapy 2 months
Reject 1

Do not code the drug therapy on I(b). The nephritis cannot be considered as a complication since it occurred prior to the drug therapy.

(2) Code any condition classifiable to Chapters I-XVIII that could result from a drug, medicament, or biological substance (including anesthesia) known or presumed to have been properly administered in correct dosage to the appropriate category in these chapters. If the Classification provides a code for the condition reported as "due to drug" or "drug induced," use this code. If no provision is made for the condition reported as "due to drug" or "drug induced," code to the unspecified code for the condition. Classify only those complications that cannot be assigned to Chapters I-XVIII to Chapter XIX (T88.-). When a condition classifiable to Chapter I-XVIII is reported due to a drug reaction (named drug) NOS, e.g., insulin reaction, code the condition as indexed and code the drug reaction to the E-code.

I	(a) Respiratory and cardiac arrest	&R092	I469
	(b) Local anesthesia reaction	Y483	

Code the conditions reported on I(a) as complications of local anesthesia since the local anesthesia is presumed to have been properly administered. Precede the complication (R092) with an ampersand. Since a complication is reported, assign only an external cause on I(b) indicating Adverse effect in therapeutic use.

I	(a) Drug reaction	T887	&Y400
	(b) Penicillin		

No specified complication is reported; therefore, code the reaction to a drug on I(a) to both a nature of injury and external cause code. Precede the E-code with an ampersand. Do not enter a code for penicillin on I(b) since it was entered on I(a).

I	(a) Encephalitis	&G040
	(b) Measles vaccination	Y590

Code I(a), encephalitis, as a complication of the measles vaccine since the measles vaccine is presumed to have been properly administered. Encephalitis is indexed following vaccination or other immunization procedure. Precede the complication (G040) with an ampersand. Code I(b), measles vaccination, toY590, Adverse effect in therapeutic use.

I	(a) Pulmonary embolism	I269	
	(b) Estrogen to control excessive	Y425	&N920
	(c) menses		

Code I(a), pulmonary embolism, as a complication of the estrogen since the estrogen is presumed to have been properly administered. Code I(b), estrogen, as an Adverse effect in therapeutic use and excessive menses as indexed. Precede the code for excessive menses with an ampersand to indicate the reason for the drug therapy.

(3) Unless there are indications to the contrary, assume the drug, medicament, or biological substance was used for medical care purposes and it was properly administered in correct dosage. Do not make this assumption if the drug was one which is not used for medical care purposes, e.g., LSD or heroin, or if it was an analgesic, sedative, narcotic or psychotropic drug (or combination thereof) or drug NOS **and** the certifier indicated the death was due to an "accident" or it occurred under "undetermined circumstances," or one or more of these drugs was taken in conjunction with alcohol; code to poisoning (refer to Section V, Part Q, 2, Poisoning by drugs).

Place	I (a) Respiratory failure	J969	
9	(b) Ingestion of mixed sedatives	T426	&X41
MOD	Accident		
1			

Code I(a) as indexed. Code I(b) nature of injury and external cause code for accidental poisoning by mixed sedatives. Code as poisoning since the drug is a sedative and the certifier indicated the death was due to an accident. Precede the E-code with an ampersand.

Place	I (a) Cerebral anoxia	G931	
9	(b) Ingestion of barbiturates	T423	&X41
	II Alcoholic intoxication	F100	

Code I(a) as indexed. Code I(b), accidental ingestion of barbiturates since the drug is a sedative and it was taken in conjunction with alcohol. (Alcohol consumption is implied by the statement of alcoholic intoxication). Precede the E-code with an ampersand. Code Part II as indexed.

(4) When the condition for which the drug is usually administered is reported elsewhere on the certificate, code this condition as indexed, preceded by an ampersand to identify the condition requiring treatment.

I	(a) Hemorrhage	K922
	(b) Ulcer of stomach	K259
	(c) Cortisone therapy	Y420
II	Scleroderma	&M349

The ulcer of the stomach is the complication of the cortisone therapy. Code the E-code for cortisone on I(c). Since cortisone is used in treatment of scleroderma, precede this condition with an ampersand.

When a complication occurs as the result of a drug being given in treatment and the condition requiring the drug is not reported anywhere on the certificate, **do not** assume a disease condition.

When a complication classifiable to Chapters I-XVIII occurs as the result of a drug being administered in therapeutic use and the condition requiring the treatment is not reported, place an ampersand preceding the code for the complication.

I	(a) Renal failure	&N19
	(b) Ingested antidiabetic drug	Y423

The renal failure on I(a) is the complication of the antidiabetic drug. Code the E-code for antidiabetic drug on I(b). **Do not** assume a disease condition requiring therapy even though antidiabetic drug is one used in the treatment of diabetes. Precede the complication with an ampersand.

(5) "Drug induced" complications

When a condition is stated to be "drug induced," consider the condition to be a complication of drug therapy, unless otherwise indicated. Code as follows:

(a) If the complication is classified to Chapter I-XVIII, code the E-code for the drug, followed by the code for the complication.

I	(a) Drug induced aplastic anemia	Y579 D611
II	Carcinoma of lung	&C349

Code I(a) Y579, complication of an unspecified drug, and the "drug induced aplastic anemia" as indexed. Ampersand the carcinoma of lung as the condition requiring treatment.

I	(a) Drug induced polyneuropathy	Y579 &G620

Code I(a) Y579, complication of an unspecified drug, and the "drug induced polyneuropathy" as indexed. Place an ampersand preceding the code for the complication.

(b) If the complication is classified to Chapter XIX, code the nature of injury code for the complication followed by the E-code for the drug. Place an ampersand preceding the E-code.

I	(a) Chloramphenicol induced reaction	T887 &Y402
	(b) Septicemia	&A419

Code I(a) as a complication of the drug (named). Code the nature of injury for the complication followed by the E-code for the named drug. Place an ampersand preceding the E-code and the septicemia to indicate the condition requiring treatment.

(6) "Intoxication by drug" due to drug therapy

When "intoxication by drug" is reported or indicated to be treatment for a condition or due to drug therapy, consider these to be complications of drug therapy, not poisoning.

I	(a) Cardiac arrest	I469
	(b) Digitalis intoxication	T887 &Y520
	(c) ASHD	&I251

Code the "digitalis intoxication" T887 &Y520 since it is indicated as treatment for a condition by its position on the record.

(7) Combined effects of two or more drugs

When a complication is reported due to the combined effects of two or more drugs, code the complication as indexed. On the next lower line, code the appropriate E-code (Y400-Y599).

Do not consider as complication of drug therapy if the combination of drugs was any two or more of the following:

Analgesics
Sedative
Narcotic
Psychotropic drug
Drug NOS

and the certifier indicated the death was due to an "accident" or it occurred under "undetermined circumstances." Code to poisoning (refer to Section V, Part Q, 2, Poisoning by drugs).

To determine the appropriate E-code, refer to the Column for "Adverse effect in therapeutic use" in the Table of Drugs and Chemicals and proceed as follows:

(a) When the drugs are classified to different fourth characters of the same three-character category, code the appropriate E-code with the fourth character for "other."

I	(a) Cardiac arrest	I469
	(b) Valium and sleeping pills	Y478
	(c) Anxiety	&F419

Code I(b) to the appropriate E-code for the combined effects of two drugs in therapeutic use classified to the same three-character category.

(b) When the drugs are classified to different three-character categories, code the E-code to Y578, "Other drugs and medicaments."

I	(a) Congestive heart failure	I500
	(b) Cor pulmonale	&I279
II	Hemorrhage from anticoagulant and aspirin	R5800 Y578

Code Y578, the appropriate E-code for combined effect of two drugs in therapeutic use classified to different three-character categories.

(8) Complication of chemotherapy

When a complication of chemotherapy is reported, code the complication as indexed and Y579 unless a malignancy is reported on the certificate. When the complication of chemotherapy is classifiable to Chapter I-XVIII and the condition for which the chemotherapy was given is not reported, place an ampersand preceding the code for the complication.

I	(a) Aplastic anemia	&D611
	(b) Chemotherapy	Y579

Code I(a), aplastic anemia due to drugs (D611) and code I(b) Y579, adverse effect of unspecified drug in correct usage. Precede the complication with an ampersand.

When a malignancy is reported and a complication of chemotherapy is reported, consider the chemotherapy to be antineoplastic drugs and code the E-code to Y433.

I	(a) Purpura	D692
	(b) Chemotherapy	Y433
	(c) Leukemia	&C959

Code I(a) as indexed. Consider the chemotherapy on line (b) as antineoplastic drugs and code Y433. Ampersand the leukemia as the condition requiring treatment.

(9) Complications of immunosuppression

Immunosuppression can be drug therapy or a complication of drug therapy. Code immunosuppression as **drug therapy** unless reported **due to** a drug, then code as a complication of the drug (D849). If the drug is not reported elsewhere on the record, code Y434 for the immunosuppressive drug.

I	(a)	Pneumonia and sepsis	J189 A419
	(b)	Immunosuppression	D849
	(c)	Chemotherapy for carcinoma of brain	Y433
	(d)		&C719

Since the immunosuppression is due to chemotherapy, consider as a complication. Ampersand the carcinoma of brain as the condition requiring treatment.

I	(a)	Immunosuppression	D849
	(b)	Vancomycin	Y408
	(c)	Acute bacterial endocarditis	&I330

Since the immunosuppression is due to a drug, consider as a complication. Ampersand the acute bacterial endocarditis as the condition requiring treatment.

I	(a)	Infection	B99
	(b)	Immunosuppression for	Y434
	(c)	Carcinoma of prostate	&C61

Consider the infection as a complication of drug therapy (immunosuppression) on I(b). Ampersand the carcinoma of prostate as the condition requiring treatment.

I	(a)	Cardiorespiratory arrest	I469
	(b)	Sepsis	A419
	(c)	Immunosuppression for	Y434
	(d)	Rheumatoid vasculitis	&M052

Consider the sepsis as a complication of drug therapy (immunosuppression) on I(c). Ampersand the rheumatoid vasculitis as the condition requiring treatment.

I	(a) Sepsis	A419
	(b) Immunosuppression	Y427
	(c) Renal transplant	&N289
II	Steroid therapy	

Consider the sepsis as a complication of drug therapy (immunosuppression) on I(b). Code external cause code to steroids, the immunosuppressive drug reported elsewhere on the record. Code and ampersand disease, kidney, as the condition for which the renal transplant was performed and the condition requiring the immunosuppressive drug.

I	(a) Respiratory arrest	R092
	(b) Septicemia	A419
	(c) Immunosuppression	Y434
II	Renal transplant	&N289

Consider the septicemia as a complication of drug therapy (immunosuppression) on I(c). In Part II, code and ampersand disease, kidney, as the condition for which the renal transplant was performed and the condition requiring the immunosuppressive drug.

I	(a) Bacteremia	A499
	(b) Immunosuppression	Y434
	(c)	
II	Idiopathic thrombocytopenia purpura	&D693

Consider the bacteremia as a complication of drug therapy (immunosuppression) on I(b). Ampersand the idiopathic thrombocytopenia purpura as the condition requiring treatment.

I	(a) Cardiac arrest	I469
	(b) ASHD	I251
	(c)	
II	D.M., AS, immunosuppression	E149 I709

Do not enter a code for the immunosuppression since there is not a reported complication.

(10) Drugs administered for one year or more

When a complication is reported due to a drug being administered for one year or more, consider the drug was given on a continuing basis. Code as a current complication; **do not** code as sequela.

I	(a) Hypercorticosteronism	E242
	(b) Steroids - 6 years	Y427
	(c) Arthritis	&M139

Consider the steroids as being administered on a continuing basis for six years. Code as a current complication of the drug. Code I(a) hypercorticosteronism, due to correct substance properly administered (E242).

2. Surgical procedures as the cause of abnormal reaction of the patient or later complication (Y83)

   a. Complications of surgical procedures

   Although almost any condition reported due to surgery is regarded as a postoperative complication, there are a few diseases that are not considered postoperative complications. The surgical procedure is not coded when there is no evidence of a surgical complication.

   (1) The following are not regarded as complications of surgical procedures:

   (a) These conditions reported due to surgery:

Infectious and parasitic diseases	A000-A309, A320-A329, A360-A399, A420-A449, A481-A488, A500-A690, A692-B349, B500-B978
Neoplasms	C000-D489
Hemophilia	D66, D67, D680, D681, D682
Diabetes	E10-E14
Alcoholic disorders	E52, E244, F100-F109, G312, G405, G621, G721, K860, I426, K292, K700-K709, L278, R780, R826, R893
Rheumatic fever or rheumatic heart disease	I00-I099
Hypertensive diseases	I11-I139
Coronary heart disease Coronary artery disease Coronary disease	I251
Ischemic cardiomyopathy	I255
Chronic or degenerative myocarditis	I514

Arteriosclerosis and arteriosclerotic conditions except those classified to I219	
Calculus or stones of any type or site	
Influenza	J100-J118
Hernia except ventral (incisional)	K400-K429 K440-K469
Diverticulitis	K570-K579
Cholelithiasis	K800-K808
Collagen diseases	M300-M359
Congenital malformations	Q000-Q999

This is not an all inclusive list.

I (a) Myocardial infarction I219
(b) Arteriosclerosis I709
(c) Surgery

Since arteriosclerosis is not accepted as a complication of surgery, do not code the surgery.

I (a) Diabetic gangrene E145
(b) Leg amputation

Do not code the leg amputation (surgery) since there is no indication of a surgical complication.

(b) Do not accept conditions with a duration which predates the surgery

I	(a)	MI	2 weeks	I219
	(b)	Surgery	2 days	
				Reject 1

Do not code the surgery on I(b). Since the MI occurred before the surgery was performed it cannot be a complication.

(2) When a condition is reported due to a **named** surgical (operative) procedure can be considered as a complication or adverse effect, code as follows:

STEP 1: Determine if the complication is in the Index qualified by the named surgery reported

I	(a)	Lymphedema	I972
	(b)	Postmastectomy	Y836
	(c)	Breast cancer	&C509

Code I(a) using **Step 1:**

Lymphedema
- postmastectomy I97.2

I	(a)	Hemorrhage	T828
	(b)	Coronary artery bypass graft	&Y832
	(c)	Coronary heart disease	&I251

Code I(a) using **Step 1:**

Hemorrhage
- due to or associated with
- - device, implant or graft
- - - heart NEC T82.8

"Coronary" is not indexed, but is located in the heart; therefore, heart can be used in place of coronary.

NOTE: Before continuing to **STEP 2** (below), it is important to determine the nature of the named surgery.

I	(a)	Hemorrhage	T828
	(b)	Cardiac revascularization	&Y832
	(c)	Cardiovascular disease	&I516

Revascularization is defined as the re-establishment of adequate blood supply to a part, by means of a vascular graft. Code I(a) as indexed:

Hemorrhage
- due to or associated with
- - device, implant or graft
- - - heart NEC T82.8

STEP 2: If the Index does not qualify the complication with the named surgery, determine if the complication is indexed under Complications (from) (of), surgical procedure.

I	(a)	Hemorrhage	T810
	(b)	Postlaminectomy	&Y836
	(c)	Intervertebral disc degeneration	&M513

The Index does not qualify hemorrhage as postlaminectomy. Code I(a) as indexed:

Complications (from) (of)
- surgical procedure
- - hemorrhage or hematoma (any site) T81.0

Code I(b), as indexed under Complication, laminectomy.

I	(a)	Intestinal obstruction	K913
	(b)	Colostomy	Y833
	(c)	Ulcerative colitis	&K519

Code I(a) as indexed:

Complications (from) (of)
- surgical procedure
- - intestinal obstruction K91.3

Code I(b), surgery, as indexed under Complications, colostomy. Code I(c), ulcerative colitis, as indexed and precede with an ampersand indicating the reason for the surgery.

STEP 3: If the Index does not qualify the complication with the named surgery nor is the complication indexed under Complications (from) (of), surgical procedures, determine if the named surgery is indexed under Complications (from) (of).

I	(a)	Stroke	T828
	(b)	Coronary artery bypass	&Y832
	(c)	Arteriosclerotic heart disease	&I251

The Index does not qualify stroke with coronary artery bypass nor is stroke indexed under Complications, surgical procedures; therefore, code I(a) using **Step 3:**

Complications (from) (of)
- coronary artery (bypass) graft
- - specified NEC T82.8

Stroke is neither an infection nor an inflammation nor mechanical; therefore, select "specified NEC."

I	(a) MI	T828
	(b) Postfemoral bypass graft	&Y832
	(c) Peripheral vascular disease	&I739

Code I(a) as indexed:

Complications (from) (of)
- graft
- - femoral artery (bypass) - See Complications, graft, arterial

Complications (from) (of)
- graft
- - arterial
- - - specified NEC T82.8

Code I(b), Y832, as indexed under Complication, graft.
Precede the E-code (Y832) by an ampersand.

I	(a) Cerebral embolism	T858
	(b) Bypass	&Y832

Code I(a) as indexed:

Complications (from) (of)
- bypass (see also Complications, graft)

Complications (from) (of)
- graft
- - specified NEC T85.8

Code I(b), Y832, as indexed under Complications, bypass.
Precede the E-code (Y832) by an ampersand.

I	(a)	Anemia	T858
	(b)	Gastrointestinal bypass	&Y832
	(c)	Diverticulitis	&K579

Code I(a) as indexed:

Complications (from) (of)
- bypass (see also Complications, graft)

Complications (from) (of)
- graft
- - intestinal tract
- - - specified NEC T85.8

Code I(b), Y832, as indexed under Complications, bypass. Precede the E-code (Y832) by an ampersand. Code I(c), Diverticulitis, K579, as indexed. Precede the code (K579) by an ampersand to indicate the reason for surgery.

(3) When a condition that is

(a) reported due to a **named** surgery cannot be assigned a code using **STEP 1- STEP 3** or

(b) reported due to a surgery (operation) (of a site) NOS, and can be considered as a complication or adverse effect, code as follows:

STEP 4: Determine if the complication is in the Index, qualified:
(a) as reported
(b) with any term meaning "due to" **surgery** (see Section II, Part C, 2, a, "Due to" Written in or Implied)
(c) as surgical or as complicating surgery
(d) as postoperative or postsurgical
(e) as postprocedural
(f) during or resulting from a procedure, **so stated**
(g) resulting from a procedure, **so stated**

I (a)	Pulmonary insufficiency following	&J952
(b)	Surgery	Y839

Code I(a) as reported using **Step 4 (a):**

Insufficiency
- pulmonary
- - following
- - - surgery J952

Precede the code J952 by an ampersand.
Code I(b), surgery, Y839, as indexed under Complication, surgical operation NEC.

I	(a)	Hypothyroidism	E890
	(b)	Thyroid surgery	Y839
	(c)	Thyroid cancer	&C73

Code I(a) using **Step 4 (b)**. Refer to "due to" list in Section II, Part C, 2, a, "Due to" Written in or Implied.

Hypothyroidism
- due to
- - surgery E890

Thyroid surgery is equivalent to surgery NOS.

I	(a)	Cardiac insufficiency	T818
	(b)	Surgery	&Y839

Code I(a) using **Step 4 (c):**

Insufficiency
- cardiac
- - complicating surgery T818

Code I(b), surgery, Y839, as indexed under Complication, surgical operation NEC. Precede the E-code (Y839) by an ampersand.

I	(a)	Pneumonia	&J958
	(b)	Surgery	Y839

Code I(a) using **Step 4 (d)**. Indexed as Pneumonia (see also Pneumonitis).

Pneumonitis
- postoperative J958

Precede the code J958 by an ampersand.
Code I(b), surgery, Y839, as indexed under Complication, surgical operation NEC.

I (a) Renal failure &N990
(b) Surgery Y839

Code I(a) using **Step 4 (e)**:

Failure
- renal
- - postprocedural N99.0

Precede the code N990 by an ampersand.
Code I(b), surgery, Y839, as indexed under Complication, surgical operation NEC.

I (a) Cerebral anoxia &G978
(b) Surgery Y839

Code I(a) using **Step 4 (f):**

Anoxia
- cerebral
- - during or resulting from a procedure G97.8

Precede the code G978 by an ampersand.
Code I(b), surgery, Y839, as indexed under Complication, surgical operation NEC.

I (a) Anoxic brain damage &G978
(b) Surgery Y839

Code I(a) using **Step 4 (g):**

Damage
- brain
- - anoxic
- - - resulting from a procedure G97.8

Precede the code G978 by an ampersand
Code I(b), surgery, Y839, as indexed under Complication, surgical procedure NEC.

STEP 5: If the Index does not provide for the complication qualified with any of the terms defined in the previous steps, determine if the complication is indexed under Complications (from)(of), surgical procedure.

NOTE: If a "named" surgery is reported, this step has already been completed in **Step 2**.

I	(a) Hyperglycemia	&E891
	(b) Surgery	Y839

Code I(a) as indexed:

Complications (from) (of)
- surgical procedure
- - hyperglycemia E89.1

Precede the code E891 by an ampersand.
Code I(b), surgery, Y839, as indexed under Complication, surgical operation NEC.

STEP 6: If the Index does not provide for the complication as above, determine if:

(a) the site of the complication or,
(b) the system in which the complication occurred (based upon the code assigned in the Index) is in the Index under Complications (from)(of), surgical procedure.

I	(a) MI	T818
	(b) Surgery	&Y839

Code I(a) using **Step 6 (a):**

Complications (from)(of)
- surgical procedure
- - cardiac T81.8

The site of a myocardial infarction is the muscle tissue of the heart that is synonymous with cardiac. Code I(b), surgery, Y839, as indexed under Complication, surgical operation NEC. Precede the E-code with an ampersand.

I	(a) Uremia	&N998
	(b) Surgery	Y839

Code I(a) using **Step 6 (b):**

Complications (from) (of)
- surgical procedure
- - genitourinary
- - - specified NEC N99.8

Uremia NOS is indexed to N19 which indicates this condition is a specified disease in the genitourinary system.

I	(a) Mesenteric embolism	K918
	(b) Gallbladder surgery	Y839
	(c) Gallstones	&K802

Code I(a) using **Step 6 (b):**

Complications (from)(of)
- surgical procedure
- - digestive system
- - - specified NEC K91.8

Mesenteric embolism is indexed to K550 which indicates that this condition is a specified disease in the digestive system.

STEP 7: When a reported complication cannot be classified to a system which is indexed, code to T818, other complications of procedures, not elsewhere classified.

I	(a) Anemia	T818
	(b) Surgery	&Y839

Anemia is not indexed as due to surgery or as postoperative. Anemia is a disease of the blood-forming organs and neither the term nor the body system is indexed under Complication (from) (of), surgical procedure.

Code I(a) as indexed:

Complications (from)(of)
- surgical procedure
- - specified NEC T81.8

Code I(b), surgery, Y839, as indexed under Complication, surgical operation NEC. Precede the E-code with an ampersand.

b. Condition necessitating surgery

When a complication of surgery is reported and the underlying condition which necessitated the surgery is stated or implied, place an ampersand (&) preceding this condition to indicate the reason for surgery. **Do not** ampersand a condition necessitating surgery unless a complication of the surgical procedure is coded. When the condition necessitating the surgery is not stated or implied and the complication is classifiable to Chapters I-XVIII, place an ampersand preceding the code for the complication.

I	(a) Pulmonary embolism	T817
	(b) Surgery for	&Y839
	(c) Gangrene of foot	&R02

Code the pulmonary embolism as the complication, Y839 for the surgery, and precede the code for gangrene with an ampersand to identify the underlying condition for which surgery was performed. Precede the surgery code with an ampersand since the complication is coded to Chapter XIX.

I	(a) Renal failure	&N990
	(b) Surgery	Y839

Code I(a), renal failure, N990, as the complication of the surgery (Y839) on I(b). Precede the N990 with an ampersand since it is classified to Chapter I-XVIII and the reason for the surgery is not reported.

When the condition that necessitated the surgery is implied by the operative term, code this condition.

When the condition that necessitated the surgery is not reported, if the organ or site is implied by the operative term, code the residual category for disease of the organ or site. An exception to this generalization is appendectomy, which is classified to appendicitis (K37) when it is the only operative procedure reported. If appendectomy is reported with other abdominal or pelvic surgery, assume the appendectomy to be incidental to the other surgery and **do not** code K37.

Use the following codes when these surgical procedures are reported and the condition necessitating the surgery is not reported:

Aorta (with any other vessel) bypass or graft	I779
Atrio-ventricular shunt	G939
Billroth (I or II)	K3190
Brock valvulotomy	Q223
Cardiac revascularization	I251
Carotid endarterectomy	I679
Choledochoduodenostomy	K829
Cholecystectomy	K829
Cholelithotomy	K802
Colostomy	K639
Coronary artery bypass graft (CABG)	I251
Coronary endarterectomy	I251
Coronary revascularization	I251
Endarterectomy (artery) (aorta)	I779
Femoral bypass	I779
Femoral-popliteal bypass	I779
Gastrectomy	K3190
Gastroenterostomy	K929
Gastro-intestinal surgery NOS	K929
Gastrojejunostomy	K929
Gastrojejunectomy	K929
Herniorrhaphy	code hernia
Hip fixation	S720
Hip pinning	S720
Hip prosthesis	M259
Hip replacement	M259
Hysterectomy	N859
Ileal conduit	N399
Ileal loop	N399
Iliofemoral bypass	I779
Lobectomy-when indicating lung	J9840
Mammary artery(internal) implant	I251
Nephrectomy	N289
Revascularization of heart	I251
Revascularization, myocardial	I251
T and A	J359
Thoracoplasty	J989
Tonsillectomy	J359
Ureterosigmoid bypass	N399
Ureterosigmoidostomy	N399
Vein stripping	I839
Vineberg operation	I251

When the condition that necessitated the surgery is not reported, do not assume a disease condition for surgical procedures such as the following:

amputation	portocaval shunt
chordotomy	rhizotomy
craniotomy	sympathectomy
cystostomy	tracheotomy
D & C	tracheostomy
gastrostomy	tubal ligation
laminectomy	vagotomy
laparotomy	vasectomy
lobectomy NOS	vas ligation
lobotomy	

If one of these types of procedures is the only entry on the certificate, code R99.

When the following complications of surgery are reported and the reason for the surgery is not reported, use the following codes as the reason the surgery was performed:

	Reason for Surgery Code		
Postsurgical hypothyroidism	E079		
Postsurgical hypoinsulinemia	K869		
Postsurgical blind loop syndrome	K639		
Other and unspecified postsurgical malabsorption	K639		
I (a) Postsurgical blind loop syndrome	Y839	K912	&K639

When a complication is reported due to:

"Surgery" with the underlying condition that necessitated the surgery stated, code:

the complication to Chapters I-XIX, the surgery to the appropriate external cause code (Y83-) preceded by an ampersand, if required, and the underlying condition necessitating the surgery preceded by an ampersand.

I	(a) Hemorrhage	T810
	(b) Surgery	&Y839
	(c) Ca. of lung	&C349

Code I(a) as postoperative hemorrhage (T810). Code the external cause code for the surgical procedure and precede by an ampersand. Code C349, cancer of lung and precede by an ampersand to identify the stated underlying condition for which surgery was performed.

I	(a) Pulmonary hemorrhage	R048
	(b) Lung cancer	&C349
II	Pneumonia due to surgery for pulmonary hemorrhage	J958 Y839 R048

Code line I(a) and (b) as indexed. Precede cancer of lung with an ampersand to indicate the underlying reason for which surgery was performed. Since the first entry in Part II, pneumonia, is reported due to surgery, code as a complication of surgery.

"Surgery" with the condition which necessitated the surgery not stated and only one condition for which surgery could have been performed is reported, code:

the complication to Chapters I-XIX, the surgery to the appropriate external cause code (Y83-) preceded by an ampersand, if required. Since only one condition for which the surgery could have been performed is reported, code the condition and precede with an ampersand to identify the reason for the surgery.

I	(a) Mesenteric thrombosis	K918
	(b) Surgery	Y839
II	ASHD	&I251

Code mesenteric thrombosis as the complication of the surgery and code Y839 for the surgery. Since ASHD is the only condition on the certificate for which surgery could have been performed, precede the code for this condition by an ampersand.

"Surgery" with the condition which necessitated the surgery not stated and two or more conditions for which surgery could have been performed are reported, code:

the complication to Chapters I-XIX and the surgery to appropriate external cause code (Y83-) preceded by an ampersand, if required. Ampersand the first mentioned condition for which the surgery could have been performed.

I (a) Wound dehiscence	T813	
(b) Surgery	&Y839	
II Cancer of lung, gastric ulcer	&C349	K259

Code I(a), wound dehiscence, T813, as the complication of the surgery and code I(b), surgery, Y839. Code Part II as indexed and precede the code for cancer of lung by an ampersand since it is the first mentioned condition for which the surgery could have been performed.

"Surgery" without indication of the condition which necessitated the surgery, code:

the complication to Chapters I-XIX, and the surgery to appropriate external cause code (Y83-) only. If the complication is classifiable to Chapters I-XVIII, precede the code for the complication with an amperesand.

I (a) Shock & hemorrhage	T811	T810
(b) Surgery	&Y839	

Code I(a), shock and hemorrhage, T811 T810, both as complications of the surgery. Code I(b), surgery, Y839 and precede the code by an ampersand.

Surgical procedure which indicates the condition for which the surgery was performed, code:

the complication to Chapters I-XIX, the surgery to the appropriate external cause code (Y83-) preceded by an ampersand, if required, and code the condition implied by the surgery following the external cause code for the surgery. Place an ampersand preceding the code for the condition.

I (a) CHF	I978	
(b) Cholelithotomy	Y838	&K802

Code I(a), CHF (congestive heart failure), as the complication of surgery. Code I(b), cholelithotomy, Y838 K802. Cholelithotomy indicates cholelithiasis (K802) was the condition for which surgery was performed. Precede K802 by an ampersand.

Surgical procedure that indicates an organ or site with one related condition for which the surgery could have been performed, code:

the complication to Chapters I-XIX, the surgery to the appropriate external cause code (Y83-) preceded by an ampersand, if required. Code the condition for which surgery could have been performed and precede with an ampersand.

I	(a) MI	T818
	(b) Gastrectomy	&Y836
II	Bleeding gastric ulcer	&K254

Code I(a), MI, as the complication of the surgery. Code I(b), gastrectomy, Y836, as indexed and precede with an ampersand. Code Part II, bleeding gastric ulcer, as indexed and precede with an ampersand to indicate it was the condition for which surgery was performed.

Surgical procedure that indicates an organ or site without a related condition for which the surgery could have been performed, code:

the complication to Chapters I-XIX, the surgery to the appropriate external cause code (Y83-) preceded by an ampersand, if required, and code disease of the organ or site following the external cause code for the surgery. Place an ampersand preceding code for the condition.

I	(a) Cardiac arrest	I469
	(b) Pneumonia	J958
	(c) Pancreatectomy	Y836 &K869

Code I(a), cardiac arrest, as indexed. Code I(b), pneumonia, as the complication of the surgery. Code I(c), pancreatectomy, as indexed, and since the surgery indicates a disease of the pancreas, code this as the reason for surgery. Precede K869 by an ampersand.

Prophylactic or nontherapeutic surgery, code:

the complication to Chapters I-XIX, and the surgery to the appropriate external cause code (Y83-) preceded by an ampersand, if required. Do not assume or ampersand a disease condition. When the complication is classifiable to Chapters I-XVIII, precede the code for the complication with an ampersand.

I	(a) Sepsis	A419
	(b) Infection	T814
	(c) Liposuction	&Y838
II		

Code I(a), sepsis, as indexed. Code I(b), infection, as the complication of the nontherapeutic surgery. Code I(c) as a specified type of surgical operation.

c. Conditions qualified as postoperative

When "postoperative," "postop," "p.o.," "post-named surgery," or synonymous terms qualifies a condition, determination must be made as to whether the condition is a surgical complication or the condition for which the surgery was performed.

The following conditions are common complications of surgery. Code these conditions as postoperative complications when preceded by or followed by one of the postoperative terms except when it is stated elsewhere on the certificate as the reason the surgery was performed.

abscess
adhesions
aspiration
atelectasis
bowel obstruction
cardiac arrest
embolism
fistula
gas gangrene
hemolysis, hemolytic infection
hemorrhage, hematoma
infarction
infection
occlusion
peritonitis
phlebitis, phlebothrombosis
pneumonia
pneumothorax
renal failure (acute)
sepsis
septicemia
septic shock
shock
thrombophlebitis
thrombosis
wound infection

This list is not all inclusive.

When "postoperative," "postop," etc., qualifies (preceding or following) a complication:

(1) If the complication is classified to Chapters I-XVIII, code the external cause code followed by the code for the complication.

I	(a)	Pneumonia postgastrectomy	Y836	J958	&K3190

Code pneumonia as the complication of surgery when reported as "postoperative" or a synonymous term. Since the reason for surgery is not stated, code disease stomach and precede by an ampersand to indicate the reason for surgery.

I	(a)	Postgastrectomy dumping syndrome	Y836	K911
	(b)			
	(c)	Carcinoma of stomach	&C169	

Code I(a), Y836, as indexed under Complication, removal of organ, and K911, as indexed under Syndrome, dumping. Code I(c) C169, as indexed under Neoplasm, stomach, malignant. Place an ampersand (&) preceding C169 to identify the underlying reason for surgery.

I	(a)	Pulmonary edema	J958	
	(b)	P.O. bowel obstruction	Y839	K566
	(c)	Ca. of cecum	&C180	
II		Surgery for bowel obstruction	K566	

Code I(a), pulmonary edema, as the complication of surgery. Code I(b) to surgery Y839 and code bowel obstruction as indexed K566 since it is stated as the reason for surgery. Code I(c), cancer of cecum, as indexed and precede the code by an ampersand to indicate the underlying reason for surgery. Part II, do not enter a code for surgery since P.O. was reported on line (b) and a surgery code was entered there. Code bowel obstruction as indexed.

(2) If the complication is classified to Chapter XIX, code the nature of injury code followed by the external cause code.

I	(a) Sepsis and anuria	A419	R34
	(b) P.O. peritonitis	T814	&Y839
	(c) P.O. ca. of colon c̄ obstruction	&C189	K566

Code peritonitis as the complication, indexed under Peritonitis, postprocedural, T814 and Y839 for the procedure. Peritonitis is considered to be a complication of surgery when reported as "postop" and not reported as the reason for surgery. Place an ampersand preceding the surgery code and the cancer of colon to identify the underlying reason for surgery.

I	(a) Cardiac arrest	I469	
	(b) Peritonitis, postop	T814	&Y839
	(c) Cholelithiasis	&K802	

Code I(a) as indexed. Code I(b), peritonitis, as the complication, T814 and Y839 for the procedure. Precede the E-code with an ampersand. Code I(c), cholelithiasis, as indexed and precede the code by an ampersand to indicate the condition necessitating surgery.

I	(a) MI postgastrectomy	T818	&Y836
II	Gastric ulcer surgery	&K259	

Code I(a), M.I. postgastrectomy, T818 Y836. M.I. is considered to be a complication of surgery when reported as "postoperative" and not reported as the reason for surgery. Precede the E-code with an ampersand. Code Part II, gastric ulcer, K259 as indexed and precede the code by an ampersand to indicate the condition necessitating surgery. Do not enter a code in Part II for surgery since gastrectomy was reported on I(a) and the code was entered there.

I	(a) Postoperative embolism	T817 &Y836
	(b) Appendectomy	
	(c) Acute appendicitis	&K359

Code I(a), postoperative embolism, as indexed to T817 and Y836 as indexed under Complication, removal of organ. Precede the E-code with an ampersand. Code I(c), acute appendicitis, as indexed and precede the code by an ampersand to identify the underlying condition that necessitated surgery.

I	(a) Heart failure	I509
	(b) ASHD	&I251
II	Thrombophlebitis, postoperative	T817 &Y839

Code I(a) and I(b) as indexed. Code Part II, thrombophlebitis, postoperative, T817 Y839. Precede the E-code (Y839) by an ampersand. Thrombophlebitis is considered to be a complication of surgery when reported as "postoperative" and not reported as the condition that necessitated surgery. Precede the code on I(b), I251 (ASHD), by an ampersand to indicate the underlying condition necessitating surgery.

I	(a) Pneumonia	J189
	(b) P.O. infection (wound)	T814 &Y839
	(c) Intestinal obstruction	&K566

Code I(a) as indexed. Code I(b), p.o. infection (wound), T814 Y839. Precede the E-code with an ampersand. Infection is considered to be a complication of surgery when reported as "postop" and not reported as the reason for surgery. Code I(c), intestinal obstruction, K566 and precede the code by an ampersand to indicate the condition necessitating surgery.

(3) When "postoperative intestinal obstruction" (any K560-K567) is reported and no condition which could have necessitated the procedure is reported:

(a) Code the postoperative intestinal obstruction as the condition, which necessitated the surgical procedure, if another condition is reported due to the postoperative obstruction.

I	(a)	Peritonitis	T814
	(b)	Postoperative bowel	&Y839 &K566
	(c)	obstruction	

Code I(a), peritonitis, as the complication of surgery. Code I(b), postoperative bowel obstruction Y839 K566. Precede the E-code with an ampersand. Precede the K566 with an ampersand to indicate the condition necessitating surgery.

(b) Code the postoperative intestinal obstruction to K913 as the complication if no other condition is reported due to postoperative obstruction.

I	(a)	Postoperative ileus	Y839 &K913

Code I(a) Y839 K913. Precede K913 by an ampersand. Consider the postoperative ileus to be the complication since no other condition is reported due to this condition.

d. Complication as first entry on lowest used line in Part I

(1) When any one of the conditions listed below is reported as the first entry on the lowest used line in Part I with surgery reported on same line or in Part II, code this condition as a complication of surgery.

Do not apply this instruction:

(a) When the surgery is stated to have been performed 28 days or more prior to death.

(b) When the surgery is stated to have been performed for the condition reported as the first entry on the lowest line.

(c) When the condition on the lowest used line predates the surgery.

Acute renal failure
Aspiration
Atelectasis
Bacteremia
Cardiac arrest (any I469)
Disseminated intravascular coagulopathy (DIC)
Embolism (any site)
Gas gangrene
Hemolysis, hemolytic infection
Hemorrhage NOS
Infarction (any site)
Infection NOS
Occlusion (any site)
Phlebitis (any site)
Phlebothrombosis (any site)
Pneumonia (J120-J168, J180-J189, J690, J698)
Pneumothorax
Pulmonary Insufficiency
Renal failure (acute) NOS
Septicemia (any A400-A419)
Shock (R570-R579)
Thrombophlebitis (any site)
Thrombosis (any site)

I	(a) Pneumonia	J958	
	(b)		
	(c)		
II	Diabetic gangrene, amputation	&E145	Y835

Code pneumonia as a complication of the amputation since it is the first entry on the lowest used line in Part I and surgery, not indicated to have been performed 28 days or more prior to death, is reported in Part II.

I	(a) Pneumonia	J189	
	(b) Pulmonary embolism, gastrectomy	T817	&Y836
	(c)		
II	Cancer of stomach	&C169	

Code pulmonary embolism as a complication of gastrectomy since it is the first entry on the lowest used line in Part I and gastrectomy, not stated to have been performed 28 days or more prior to death, is reported on the same line as the embolism.

Date of death 09/17/96

I	(a) Pleural effusion	J90	
	(b) Pulmonary embolism & pneumonia	T817	J189
	(c)		
II		&Y839	
	Operation block / 9/15/96 /		

NOTE: When a date is entered in the operation block, code as if surgery was performed on that date.

Code I(a) as indexed. Code pulmonary embolism as the complication of surgery since this condition is the first condition on the lowest used line in Part I and surgery was performed less than 28 days prior to death.

I	(a) Pulmonary infarction	I269
	(b)	
	(c)	
II	Cardiac catheterization	

Cardiac catheterization is not classified as a surgical procedure; therefore, do not code the pulmonary infarction as a complication.

(2) When any of the conditions listed below are reported as the first entry on the lowest used line in Part I and abdominal or pelvic surgery is reported on the same line or in Part II, code complication as indexed and the surgery to appropriate external cause code (Y83-) where it is indicated on the record by the certifier.

Peritonitis Intestinal obstruction (K560-K567)

I	(a) Pneumonia	J189
	(b) Peritonitis	K659
	(c) Intestinal obstruction	K913
II	Colostomy - ulcerative colitis	Y833 &K519

Code intestinal obstruction on I(c) as a complication of the surgery reported in Part II, since the surgery was abdominal and there is no indication that this procedure was performed 28 days or more prior to death.

(3) When any of the conditions listed below are reported as the first entry on the lowest used line in Part I and **surgery of the same site or region** is reported on the same line or in Part II, code complication as indexed and the surgery to appropriate external cause code (Y83-) where it is indicated on the record by the certifier.

Hemorrhage of a site Fistula of site(s)

I	(a) Pneumonia	J189
	(b) Gastrointestinal hemorrhage	T810
II	Gastrectomy for stomach cancer	&Y836 &C169

Code gastrointestinal hemorrhage as a complication of the surgery reported in Part II since the surgery was of the same region and there is no indication that surgery was performed 28 days or more prior to death.

(4) When conditions listed in paragraph d(1), (2), and (3) are reported as the first entry on the lowest used line in Part I and **surgery stated to have been performed 28 days or more prior to death** is reported on the same line or in Part II, code condition as indexed. Do not code as a complication of the surgery.

I	(a)	Congestive heart failure	I500
	(b)	Shock	R579
	(c)	Acute renal failure	N179
II		Surgery performed 6 wks. ago for colon cancer	C189

Code all conditions on this record as indexed. Do not code acute renal failure as a complication of surgery since the surgery was performed 28 days or more prior to death.

(5) When adhesions are reported as the first entry on the lowest used line in Part I and **surgery stated to have been performed less than one year prior to death** is reported on same line or in Part II, code adhesions to K918 and code the surgery to appropriate E-code (Y83-).

I	(a)	Septic shock	A419	
	(b)	Peritonitis	K659	
	(c)	Adhesions	K918	
II		Surgery - 6 mos. ago for ca. of colon	Y839	&C189

Code adhesions on I(c) as a complication of surgery and code the external cause code for the surgery as the first entry in Part II. Code the condition for which surgery was performed and precede by an ampersand.

(6) When adhesions are reported as the first entry on the lowest used line in Part I and **surgery stated to have been performed one year or more prior to death** is reported on same line or in Part II, code adhesions to K918, Other postprocedural disorders of the digestive system and code the surgery to Y883, sequela of surgery.

I	(a)	Renal failure	N19	
	(b)	Intestinal obstruction	K566	
	(c)	Adhesions	K918	
II		Surgery - 16 months ago for diverticulitis	Y883	&K579

Code adhesions on I(c) as a complication of the surgery reported in Part II. Since this surgery was performed more than 1 year ago, code Y883 for the sequela of surgery. Code diverticulitis as the condition for which surgery was performed.

e. Ill-defined condition as first entry on lowest used line in Part I

When an ill-defined condition classifiable to the following codes:

I959 (Hypotension, unspecified)
I99 except occlusion and infarction (other and unspecified disorders of circulatory system)
J960 (Acute respiratory failure)
J969 (Respiratory failure, unspecified)
P285 (Respiratory failure of newborn)
R000-R568, R59-R948, R960-R99 (symptoms, signs not elsewhere classified)

is reported as the first entry on the lowest used line in Part I with surgery reported on the same line or in Part II, proceed:

(1) Code the ill-defined condition, then code the remaining conditions as if the ill-defined condition had not been reported.

I (a) Senility and MI	R54	T818
II Gastrectomy	&Y836	&K3190

Code senility on I(a) R54 as indexed. Then code MI as if senility had not been reported. MI is coded as the complication of the surgery reported in Part II. Gastrectomy indicates a disease of the stomach. Precede both the code for the surgery and the code for disease, stomach, with an ampersand.

I (a) Renal failure	N990	
(b) Cause unknown	R97	
II Mastectomy	Y836	&N649

Code cause unknown on I(b) as indexed, then code renal failure as the complication of the surgery reported in Part II as if cause unknown had not been reported. Code Part II, mastectomy, Y836 N649. Code disease breast as the condition necessitating the mastectomy and precede it by an ampersand.

Exceptions:

Code each entry as indexed when:

The first entry on the lowest line in Part I is	And a condition classifiable to one of the following codes is reported on the same line or in Part II	
R000	B238 B24 I010-I099 I110-I119	I130-I461 I470-I519 J380-J399
R002	B238 B24 I010-I099 I110-I119	I130-I461 I470-I519
R010	B238 B24 I010-I099 I110-I119	I130-I461 I470-I519
R011	B238 B24 I010-I099 I110-I119	I130-I461 I470-I519

The first entry on the lowest used line in Part I is	And a condition classifiable to one of the following codes is reported on the same line or in Part II	
R012	B238 B24 I010-I099 I110-I119	I130-I461 I470-I519
R02	A480 E100-E149 I702 I709	I730-I739 K350-K389 K400-K469
R030	B238 B24 I10-I139	
R040	B238 B24 C300-C319 C783 C910-C959 D023 D140 D385 I10	J00-J019 J068-J069 J300-J311 J320-J348 J393-J399

The first entry on the lowest used line in Part I is	And a condition classifiable to one of the following codes is reported on the same line or in Part II	
R041	B238 B24 C090-C148 C320-C329 C783 C798 C910-C959 D000 D020 D104-D109	D141 D370 D380 J00 J020-J040 J042-J069 J311-J312 J350-J399
R042	A162-A169 A1690 B238 B24 C320-C349 C780 C783	C910-C959 D020-D022 D141-D143 D380-D381 J040-J22 J370-J387 J393-J989
R048	A162-A169 A1690 B238 B24 C320-C349 C780 C783	C910-C959 D020-D022 D141-D143 D380-D381 J040-J22 J370-J387 J393-J989

The first entry on the lowest used line in Part I is	And a condition classifiable to one of the following codes is reported on the same line or in Part II	
R090	B238 B24 T360-T659	
R11	B238 B24 J1010 J108	J1110 J118 K250-K289 K800-K820
R17	B150-B199 B238 B24 C220-C259	C787-C788 K700-K839
R18	B238 B24 C160-C269 C56 C784 C787-C788	C796 C80-C969 K700-K709 K730-K749
R233	B238 B24 D690-D699	
R250-R258	G20-G219 G230-G259 G400-G419 G510-G519 G800-G839	

The first entry on the lowest used line in Part I is	And the condition classifiable to one of the following codes is reported on the same line or in Part II	
R260-R268	A521 B238 B24	
R270-R278	A521 B238 B24	G110-G119
R290	B238 B24 E200-E209	
R298	B238 B24 G800-G839	
R34	B238 B24 N200-N209	T795
R400-R402	B238 B24 E100-E15 K729 S020-S024 S026-S029	S060-S099 T902 T905-T909
R568	A35 B238 B24 G400-G419	O100-O11 O13-O16

The first entry on the lowest used line in Part I is	And a condition classifiable to one of the following codes is reported on the same line or in Part II	
R590	B200-B222 B227 B231 B24	B270-B279 C810-C969
R591	B200-B222 B227 B231 B24	B270-B279 B588-B589 C810-C969
R599	B200-B222 B227 B231 B24	B270-B279 C810-C969
R600-R609	B238 B24 E43 E877	N000 - N059
R630	F500	
R631	E232 N251	
R730	B238 B24 E100-E162 E891	
R780	F100-F109	

The first entry on the lowest used line in Part I is	And a condition classifiable to one of the following codes is reported on the same line or in Part II
R80	B238 B24 C900 D511 D649 N000-N079 N170-N19 N250-N289
R81	B238 B24 E100-E149 E748

I	(a) Pneumonia	J189
	(b) Coma	R402
II	Surgery for diabetic gangrene	E145

Code I(a) and I(b) as indexed. Coma is reported as the first condition on the lowest used line, **but** diabetic gangrene is reported in Part II. Therefore, pneumonia cannot be coded as a complication of surgery. Do not enter a code for surgery since no complication is reported.

I	(a) Aspiration pneumonia	J690
	(b) Jaundice	R17
II	Cholecystectomy for gallstones	K802

Code I(a) and I(b) as indexed. Jaundice is reported as the first condition on the lowest used line with gallstones reported in Part II. Therefore, aspiration pneumonia cannot be coded as a complication of surgery. Code Part II, K802 (gallstones). Do not enter a code for the cholecystectomy since no complication was reported.

I	(a) Sepsis	A419
	(b) Gangrene, pneumonia, and	R02 J189 I709
	(c) arteriosclerosis	
II	Surgery	

Code I(a) and I(b) as indexed. Gangrene is reported as the first condition on the lowest used line, but arteriosclerosis is reported on the same line; therefore, pneumonia cannot be a complication of surgery. Do not enter a code for surgery since no complication is reported.

f. Relating surgical procedure to condition for which surgery was performed

(1) When a condition of unspecified site is reported with surgery of a defined site, code the condition of unspecified site to the defined site.

I	(a) Aneurysm	I719
II	Operation for aortic aneurysm	I719

Code I(a), aneurysm of unspecified site to aortic aneurysm, I719, since the surgery is of a defined site. Code aortic aneurysm in Part II. Do not enter a code for the surgery since there is no reported complication.

(2) When a condition of a site is reported with surgery of a more defined part of the site, code the condition to the more specified site.

I	(a) Carcinoma colon	C186
II	Left colectomy	

Code I(a), carcinoma colon to carcinoma left colon, C186, since the surgery is of a more specified part of the colon. Do not enter a code for the surgery since there is no reported complication.

(3) When a condition of a site is reported with surgery for the same condition of unspecified or a less defined part of the site, code the condition to the most defined site.

I	(a) Cancer of head of pancreas	C250
II	Pancreatectomy for cancer	C250

Code I(a), cancer head of pancreas, C250. Code Part II, as cancer of head of pancreas since elsewhere a more defined site was reported of the condition for which surgery was performed. Do not enter a code for the surgery since there is no reported complication.

(4) Do not apply these instructions when more than one condition or a condition of multiple specified sites which could have necessitated the surgery is reported.

I	(a) Cardiac arrest	I469
	(b) Respiratory arrest	R092
	(c) Carcinoma of lung, liver, brain	C349 C787 C793
II	Findings of operation: Carcinoma	C80

Code I(a), I(b) and I(c) as indexed and according to neoplasm instructions. Code Part II, carcinoma, C80. Do not code the carcinoma to a more defined site since multiple specified sites are reported for which the surgery could have been performed. Do not enter a code for the surgery since there is no reported complication.

g. Complications of amputation and amputation stump

When a complication (stated or implied) occurs as a result of an amputation, code the complication to Chapters I-XIX. When the complication is classifiable to Chapters I-XVIII and the condition that necessitated the amputation is not reported, precede the code for the complication with an ampersand.

I	(a)	Renal failure	&N990
	(b)	Below knee amputation of leg	Y835

Code I(a), renal failure, N990 as the complication of surgery. Code I(b), below knee amputation of leg, Y835. Precede the N990 with an ampersand since it is classified to Chapter XIV and the condition that necessitated the amputation is not reported.

When there is a complication of an amputation stump, code the complication to T873-T876 or to the appropriate code in Chapters I-XVIII. (Do not use T873-T876 for "stump" of internal organs).

I	(a)	Infected amputation stump	T874 &Y835
	(b)	Osteosarcoma of leg	&C402

Code I(a), infected amputation stump T874 Y835. Precede the E-code, Y835, by an ampersand. Code I(b), osteosarcoma of leg, C402. Precede the code C402 by an ampersand to indicate the condition that necessitated the amputation.

3. Complications of medical procedures other than surgical (Y84)

Medical procedures are any type of nonsurgical procedures used in the treatment of diseases or injuries. The external cause is classified to Y840-Y849. Although almost any condition reported due to medical procedures other than surgical is regarded as a complication, there are a few diseases that are not considered complications. Do not code the conditions listed under 2. a. (1) (a) in Section V, Part R as complications of medical procedures. If the reason for the medical procedure is not reported, do not assume a disease condition.

a. When a condition is reported due to a named medical procedure other than a surgical operation or is modified by a named procedure and can be considered as a complication(s) or adverse effect, code as follows:

STEP 1: Determine if the complication is in the Index qualified by the specific procedure reported.

I (a) Kidney blockage &N990
(b) Postcystoscopic procedure Y848

Code I(a) as indexed using **Step 1:**

Block
- kidney
- - postcystoscopic or postprocedural N99.0.

Code I(b) Y848 as indexed under Complication, procedures other than surgical operation, specified NEC. Precede N990 with an ampersand

STEP 2: If the Index does not qualify the complication with the specified procedure, determine if the procedure is indexed under Complications (from) (of).

I (a)	Urinary tract infection	T835
(b)	Post-indwelling urinary catheter	&Y846

Code I(a) using **Step 2:**

Complications (from) (of)
- catheter (device)
- - urinary (indwelling)
- - - infection or inflammation T83.5

Select infection or inflammation since urinary tract infection is an infections condition.

Code I(b) Y846 as indexed under Complication, catheter, catheterization (urinary). Precede the E-code with an ampersand.

I (a)	Pulmonary embolism	T838
(b)	Catheter	&Y846

Code I(a) using **Step 2:**

Complications (from) (of)
- catheter (device)
- - specified NEC T83.8

Select specified since pulmonary embolism is a specified complication.

Code I(b) Y846 as indexed under Complication, catheter, catheterization (urinary). Precede the E-code with an ampersand.

When the Index does not provide for the term as specified in **STEP 1** and **STEP 2**, code the complication as if procedure NOS was reported instead of the named medical procedure as defined in the following instructions:

NOTE: Before continuing to **STEP 3**, it is important to determine the nature of the named procedure.

I	(a)	Peritonitis	T802
	(b)	Peritoneal lavage	&Y841
	(c)	Chronic renal failure	&N189

Peritoneal lavage is defined in Dorland's Illustrated Medical Dictionary as "dialysis by instillation into the peritoneal cavity.....". Following this definition, peritoneal lavage should be coded as dialysis.

Code I(a) using **Step 2:**

Complications (from) (of)
- dialysis (renal) (see also Complications, infusion)
- infusion
- - infection NEC T80.2

Select infection since peritonitis is an infections condition.

Code I(b) Y841 as indexed under Complication, dialysis (kidney). Precede the E-code and the condition requiring treatment with an ampersand.

b. When a condition that is

(1) reported due to a named procedure cannot be assigned a code using **STEP 1** or **STEP 2** or

(2) reported due to a procedure other than surgical operation (of a site) NOS or therapy NOS, and can be considered as a complication(s) or adverse effect, code as follows:

STEP 3: Determine if the complication is in the Index, qualified:

(a) as reported
(b) with any term meaning "due to" procedure or medical care (see Section II, Part C, 2, a, "Due to" written in or implied)
(c) as postprocedural

I	(a)	Renal failure	&N990
	(b)	Paracentesis	Y844

Code I(a) as indexed using **Step 3 (c):**

Failure
- renal
- - postprocedural N99.0

Code I(b) Y844 as indexed under Complication, paracentesis. Precede N990 with an ampersand.

STEP 4: If the Index does not provide a code for the complication in Steps 1-3, determine if:

(a) the site of the complication or
(b) the system in which the complication occurred (based upon the code assigned in the Index) is in the Index under Complications (from)(of), medical procedure.
(c) the system in which the complication occurred (based upon the code assigned in the Index) is in the Index under Complications (from)(of), postprocedural.

I	(a)	Cardiac arrest	T818
	(b)	Therapy	&Y849
	(c)	Arteriosclerotic heart disease	&I251

Code I(a) using **Step 4 (a):**

Complications (from)(of)
- medical procedure
- - cardiac T81.8

Select cardiac since this is the site of the complication.

Code I(b) Y849 as indexed under Complication, procedures other than surgical operation. Precede the E-code and the condition requiring treatment with an ampersand.

I	(a)	Pulmonary edema	&J958
	(b)	Endotracheal tube	Y848

Code I(a) using **Step 4 (b):**

Complications (from)(of)
- medical procedure
- - respiratory
- - - specified NEC J95.8

Select respiratory, specified since pulmonary edema is classified to J81, a specified disease in the respiratory system.

Code I(b) Y848 as indexed under Complication, procedures other than surgical operation, specified NEC. Precede J958 with an ampersand.

I	(a) Stroke	I64
	(b) Cerebral embolism	T817
	(c) Renal angiogram	&Y848

Code I(b) using **Step 4 (b):**

Complications (from)(of)
- medical procedure
- - circulatory T81.7

Select circulatory since cerebral embolism is classified to I634, a specified disease in the circulatory system.

Code I(c) Y848 as indexed under Complications, procedure other than surgical operation, specified NEC. Precede the E-code with an ampersand.

STEP 5: When a reported specified complication cannot be classified to a system that is indexed, code T818, Other complications of procedures, not elsewhere classified.

I	(a) Shock	R579
	(b) Coagulation disorder	T818
	(c) Hyperthermia therapy	&Y848

Coagulation disorder is not indexed as due to a procedure or as postprocedural. This condition is classified to D689, a disease of the blood-forming organs. Neither the term nor the body system is indexed under Complication (from) (of), medical procedure.

Code I(b) using **Step 5:**

Complications (from)(of)
- procedure
- - specified T81.8

Select specified since coagulation disorder is a specified complication.

Code I(c) Y848 as indexed under Complication, procedures other than surgical operation, specified NEC. Precede the E-code with an ampersand.

4. Complications of procedures involving administration of drugs, radiation, and instruments

   a. Many procedures (e.g., angiogram, barium enema, pyelogram) involve the administration of drugs and the use of x-ray or radioactive substances and various instruments. When complications of these procedures are reported, determine, if possible, which specific part of the procedure caused the complication. Assign the appropriate codes for the complication and the procedure. When the complication is classifiable to Chapters I-XVIII and the reason for the procedure is not reported, precede the code for the complication with an ampersand. If the reason for the medical care is not reported, do not assume a disease condition.

I	(a) Pulmonary embolism	T828
	(b) Cardiac catheterization	&Y840
	(c) Ventricular septal defect	&Q210

Code I(a) as the complication of the catheterization reported on I(b). Code I(b) as indexed, Y840 and precede with an ampersand. Code I(c) as indexed and precede with an ampersand to indicate the reason for the procedure.

I	(a) Barium impaction of intestine	Y575 K564
	(b) Barium enema	
	(c) Colon polyps	&K635

Code the barium on I(a) to adverse effect in therapeutic use, Y575, since it was the drug that caused the impaction. Code the complication, impaction, as indexed, Impaction, intestine, K564. Do not enter a code on I(b) for barium since it was reported on I(a). Code I(c) as indexed and precede with an ampersand to indicate the reason for the procedure.

I	(a) Anaphylactic shock	T886
	(b) Contrast medium (aortogram)	&Y575
II	Dissecting aortic arch aneurysm	&I710

Code I(a) as the complication of the contrast medium. Indexed as Shock, anaphylactic, correct substance properly administered. Code I(b) contrast medium as adverse effect in therapeutic use, since the drug caused the anaphylactic shock. Code Part II as indexed and precede with an ampersand to indicate the reason for the procedure.

I	(a) Peritonitis	K659
	(b) Hemorrhage of colon	K918
	(c) Barium enema	Y848
	(d) Diverticulitis	&K579

Code I(a) as indexed. Code I(b) as the complication of the administration of the enema. Code I(c) barium enema, Y848, since the hemorrhage most likely resulted from the administration of the enema rather than the barium. Code I(d) as indexed and precede with an ampersand to indicate the reason for the procedure.

I	(a) Cerebral hemorrhage	T817
	(b) Cerebral arteriogram	&Y848

Code I(a) as the complication of the arteriogram. Code I(b) cerebral arteriogram, Y848, since the hemorrhage resulted from the procedure and precede with an ampersand. Do not assume a disease condition for the cerebral arteriogram.

b. When a complication results from the administration of anesthesia, code the complication as indexed and code the appropriate external cause code (Y480-Y485) (refer to Section V, Part R, 1, Drugs, medicaments and biological substances causing adverse effects in therapeutic use).

I	(a) Cardiac failure	I509
	(b) Anesthesia for prostate surgery	Y484
	(c)	&N429

Code I(a) as indexed and as the complication of the anesthesia. Code I(b) anesthesia to adverse effect in therapeutic use, Y484, since it was the anesthesia that caused the heart failure. Code I(c) N429, disease prostate, as the reason for surgery and precede with an ampersand.

I	(a) Cardiac failure	T818
	(b) Prostate surgery under anesthesia	&Y839
	(c) Benign prostatic hypertrophy	&N40

Code I(a) as indexed under Failure, heart, complicating surgery. Code I(b) prostate surgery as indexed. Code I(c) as indexed and precede with an ampersand to indicate the reason for surgery.

5. Complications of radiation during medical care (Y842)

When a complication results from exposure to radiation, except radio-frequency radiation and from infrared heaters and lamps and visible and ultraviolet light sources, consider as exposure of patient to radiation during medical care unless there is information on the certificate that indicates otherwise. Code complications of radiation during medical care as follows:

a. Complications qualified as "radiation," "radiation-induced," "due to radiation," or "following radiation"

(1) Coding the complication

(a) If the Index provides a code for the complication qualified by one of these terms, use that code.

(b) If the Index does not provide a code for the complication qualified by one of these terms, code the complication as indexed without the qualifier.

(2) Placement of the nature of injury and external cause code

(a) If the complication is qualified as "radiation" or "radiation-induced" and classified to Chapters I-XVIII, code the external cause code followed by the code for the complication.

(b) If the complication is qualified as "radiation" or "radiation-induced" and classified to Chapter XIX, code the nature of injury code followed by the external cause code.

b. Code the external cause code to Y842, (Radiological procedure and radiotherapy).

c. Use of ampersand

(1) If the reason for the radiation therapy is reported, precede the code for this condition with an ampersand.

(2) If the reason for the radiation therapy is not reported and a malignant neoplasm is reported, precede the code for the neoplasm with an ampersand.

(3) If the reason for the radiation therapy is not reported and the complication is classified to Chapters I-XVIII, precede the complication with an ampersand.

I	(a) Pulmonary edema	J81
	(b) Radiation pneumonitis	Y842 J700
	(c) Radiation therapy for cancer of breast	
	(d)	&C509

Code I(b) to the external cause code as indexed where the radiation is first reported followed by the code for the complication. Pneumonitis is the complication of the radiation and is indexed, Pneumonitis, radiation. Precede the code for cancer of breast with an ampersand to indicate the reason for the radiation.

I	(a) Carcinomatosis	C80
	(b) Oat cell carcinoma	&C349
	(c)	
II	X-ray fibrosis - lung	Y842 J701

Code Part II to the external cause code as indexed followed by the code for the complication. Fibrosis of lung is the complication and is indexed, Fibrosis, lung, following radiation. Code I(b) as indexed and precede with an ampersand to indicate the reason for the radiation.

I	(a) Pneumonia	J700
	(b) Radiation	Y842
	(c) Carcinoma of face	&C760

Pneumonia is the complication of the radiation reported on I(b). Code I(a) as indexed, Pneumonia, radiation. Code the external cause code as indexed on I(b). Code I(c) as indexed and precede with an ampersand to indicate the reason for the radiation.

I	(a) Debility	R53
	(b) Radiation therapy	Y842
	(c) Hodgkin's disease	&C819

Debility is the complication of the radiation reported on I(b). Code I(a) as indexed since the Classification does not provide a code for radiation debility. Code the external cause as indexed on I(b). Code I(c) as indexed and precede with an ampersand to indicate the reason for the radiation.

I	(a) Radiation-induced acute	Y842 J700
	(b) bronchitis	
II	Carcinoma of trachea	&C33

Code I(a) to the external cause code as indexed, followed by the code for the complication. Acute bronchitis is the complication and is indexed Bronchitis, acute, due to radiation. Code Part II as indexed and precede with an ampersand to indicate the reason for the radiation.

I	(a) Alopecia	L581
	(b) Radiation	Y842
II	Hodgkin's granuloma	&C817

Alopecia is the complication of the radiation reported on I(b). Code I(a) as indexed under Alopecia, X-ray. Code the external cause as indexed on I(b). Code Part II as indexed and precede with an ampersand to indicate the reason for the radiation.

I	(a) Peritonitis	K659
	(b) Intestinal fistula	&K632
	(c) Radiation therapy	Y842

Intestinal fistula is the complication of the radiation reported on I(c). Code I(b) as indexed since the Classification does not provide a code for radiation intestinal fistula. Code the external cause as indexed on I(c). Precede the complication (intestinal fistula) with an ampersand since it is classified to Chapters I-XVIII and the reason for the radiation was not reported.

d. When radiation fibrosis is reported without a site or of a site not indexed, code the fibrosis to T66, Complications, radiation.

I	(a) Cerebral anoxia	G931
	(b) Carcinoma of tongue	&C029
II	Radiation fibrosis, upper airway obstruction	T66 &Y842 J988

Code Part II Complications, radiation for the fibrosis and the external cause code as indexed. Code the nature of injury followed by the external cause code. Place an ampersand preceding the E-code and the condition on I(b) to indicate the reason for the radiation.

I (a) Radiation pelvic fibrosis	T66	&Y842
(b) Carcinoma of uterus	&C55	

Code I(a) complications, radiation for the pelvic fibrosis and the external cause code as indexed. Code the nature of injury code followed by external cause code. Place and ampersand preceding the E-code and the condition on I(b) to indicate the reason for the radiation.

6. Misadventures to patients during surgical and medical care (Y60-Y69)

Except for poisoning, overdose of drug and wrong drug given in error, code most misadventures (accidents or errors) to patients during surgical and medical care to Complications of surgical and medical care (T800-T889) in the Nature of Injury Chapter and to Y600-Y69 in the External Cause Chapter. Code burns from local applications or irradiation to burns in the Nature of Injury Chapter and to Y600-Y69 in the External Cause Chapter. Code trauma from instruments during delivery to Chapter XV and do not use an external cause code. A limited number of conditions attributable to misadventure to patient (Y600-Y69) in the external cause code, e.g., serum hepatitis, are classified to Chapters I-XVIII.

Indications of Misadventures

Hemorrhage (of a site) Rupture (of a site)	Stated as intraoperative or during medical and surgical care
Cut or cutting (of a site) Perforation (of a site) Puncture (of a site) Laceration (of a site)	Reported as postoperative, intraoperative, during or due to medical and surgical care
Burns (of a site)	From local applications or irradiation
Serum hepatitis	From blood transfusions

This list is not all inclusive.

When a misadventure to patient during surgical and medical care (classifiable to Y600-Y69) is reported and the condition, which necessitated the surgical or medical care, is stated or implied, precede the code for this condition with an ampersand.

I (a)	Hemorrhage during	T810
(b)	craniotomy	&Y600
(c)	Brain tumor	&D432

Code I(a) complication, surgical procedure, hemorrhage. Since "during" is stated, interpret I(b) as a misadventure and code Misadventure, hemorrhage, surgical operation. Precede I(c) with an ampersand to indicate the condition requiring surgery.

I (a)	Perforation of colon	T812
(b)	Laparotomy	&Y600

Code I(a) perforation, surgical. Interpret I(b) as a misadventure and code Misadventure, perforation, surgical operation.

I (a)	Cardiac tamponade	I319
(b)	Perforation of auricle by cardiac catheter	T812 &Y605
II	Therapeutic misadventure	T889

The perforation occurred during a cardiac catheterization. Code I(b) as accidental perforation of organ during a procedure, and accidental perforation during a heart catheterization. Code Part II as indexed, Misadventure (prophylactic) (therapeutic).

I (a)	Peritonitis	K659
(b)	Accidental perforation of	T812 &Y607
(c)	colon	
II	Self-administered tap water enema	

I(b) is a reported misadventure occurring during medical care. Code T812, accidental perforation during a procedure and Y607, accidental perforation during the administration of an enema.

I	(a) Serum hepatitis	B169
	(b) Blood transfusion	Y640
	(c) Leukemia	&C959

Serum hepatitis is a misadventure occurring during a blood transfusion. Code I(a) B169, serum hepatitis, and I(b) Y640, contaminated medical or biological substance transfused or infused. Precede the condition necessitating the blood transfusion with an ampersand.

I	(a) Burns	T300
	(b) Radiation therapy	&Y632
	(c) Cancer of esophagus	&C159

Code I(a) T300, radiation burns. Code I(b) Y632, overdose of radiation in therapy. Code I(c) as indexed preceded by an ampersand to indicate the condition for which the radiation was given.

I	(a) HIV	B24
	(b) Blood transfusion	
	(c) Hemophilia	D66
II		

Code line (a) and (c) as indexed. No code for line (b) since there are no complications reported. Do not consider HIV (any B20-B24) as a misadventure occurring during a blood transfusion.

S. Sequela of injuries, poisonings, and other consequences of external causes

1. Sequela of injuries, poisoning, and other consequences of external causes (T900-T983)

Use these categories for the classification of injuries and poisonings (conditions in S00-T88) if:

a. A statement of a late effect or a sequela of the condition in S00-T88 is reported regardless of reported duration.

I	(a)	Sequela of hip fracture	T931
	(b)		
	(c)		
II			&Y86

Code I(a) to T931 since it is stated as a sequela of hip fracture. Code Part II as sequela of accident NEC.

b. The condition in S00-T88 is stated to be ancient, chronic, healed, history of, old, remote, regardless of reported duration, or the interval between onset of this condition and death is indicated to be 1 year or more, whether or not the residual (sequela) effect is specified.

Date of death 12/1/98

I	(a)	Old head injury	T909
II			&Y86

MOD 1

Accident	Farm	Date of injury 9/3/98	Tractor overturned

Code I(a) old head injury to Sequela, injury, head since it is stated as old. Interpret "tractor overturning on farm" as contact with agricultural machinery. Code Part II accident - tractor overturned to sequela of other accidents since it resulted in an injury stated as old.

c. A chronic condition with or without a duration is reported due to a condition in S00-T88.

I	(a)	Chronic pyelitis		N119
	(b)	Quadriplegia		T913
	(c)	Fracture cervical spine		T911
II				&Y850

MOD 1 | Accident | 2 car collision |

Code I(a) chronic pyelitis as indexed. Code I(b) Quadriplegia, traumatic as indexed. Code I(c) fracture cervical spine to sequela of fracture of spine since it caused a chronic condition. Code Part II accident - 2 car collision, to Sequela, motor vehicle accident since it resulted in injuries that caused a chronic condition.

d. A condition with a duration of 1 year or more that was due to the condition in S00-T88 is reported.

I	(a)	Paralysis	16 mos.	T941
	(b)	Spinal cord injury		T913
	(c)	Auto accident		&Y850

Code I(a) paralysis to sequela of traumatic paralysis since it is reported due to trauma and has a duration of 1 year or more. Code I(b) spinal cord injury to Sequela, injury, spinal, cord since it caused a condition of 1 year or more. Code I(c) auto accident to sequela of motor vehicle accident.

e. More than one nature of injury or a nature of injury and an external cause are reported on the same line with a duration of 1 year or more, apply the duration to each condition.

I	(a)	Head injury and skull fracture	Years	T909	T902
	(b)				
II		Fall		&Y86	

Code both conditions on (a) as sequela. Do not disregard the duration since there is more than one injury on same line.

I	(a)	Gunshot wound head	Years	T901	&Y86

Code both head wound and gunshot as sequela. Apply duration to nature of injury and external cause.

2. Sequela of external causes (Y850-Y899)

Y850	Sequela of motor vehicle accident (includes V01-V89)
Y859	Sequela of other and unspecified transport accidents (includes V90-V99)
Y86	Sequela of other accidents (excludes W78-W80)
Y870	Sequela of intentional self-harm
Y871	Sequela of assault
Y872	Sequela of events of undetermined intent
Y880	Sequela of adverse effects caused by drugs, medicaments, and biological substances in therapeutic use
Y881	Sequela of misadventures to patients during surgical and medical procedures
Y882	Sequela of adverse incidents associated with medical devices in diagnostic and therapeutic use
Y883	Sequela of surgical and medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure
Y890	Sequela of legal intervention
Y891	Sequela of war operations
Y899	Sequela of unspecified external cause

Use the preceding categories with the appropriate fourth characters for the classification of external causes of injury (V010-Y849) if:

a. A statement of a late effect or sequela of the external cause is reported.

I	(a) Paralysis, sequela of	T941	&Y86
	(b) fall down steps		

Code I(a) to sequela of traumatic paralysis and sequela of fall down the steps.

b. An injury that is stated to be ancient, healed, history of, old, remote, or a delayed union, malunion or nonunion of a fracture that was due to the external cause is reported.

	I (a) Pneumonia	J189	
MOD	(b) Debility	R53	
1	(c) Nonunion of hip fracture	M841	
	II Inanition	R64	Y86

Accident	Fell at home

Code I(c) as indexed. Code sequela of fall last in Part II since the fall resulted in nonunion of the fracture.

I (a) ASHD		I251
II Old fractured hip		T931 &Y86

Code I(a) ASHD as indexed. Code Part II old fractured hip, T931 Y86 since the injury was specified as old.

c. If the external cause is stated to be ancient, history of, old, remote, regardless of reported duration, or the interval between onset of the external cause and death is indicated to be 1 year or more.

	I (a) Old fall, fractured hip	6 months	T931 &Y86
	(b)		
	(c)		
MOD	II		T931
1			

Accident	Fell and fractured hip 6 months ago

Code as sequela since the external cause is stated as "old."

d. A chronic condition with or without a duration is reported due to conditions in V010-Y849 (excludes W78-W80).

I (a) Chronic subdural hematoma		T905
(b) Fall		&Y86

Code I(a) chronic subdural hematoma to sequela of intracranial injury since it is reported as chronic. Code I(b) fall as sequela of accident NEC since it resulted in a chronic condition.

Male, 55 years

I (a) Respiratory arrest		R092
(b) COPD		J958
(c) Post status lobectomy - ca. of lung		Y883 &C349

Code I(a) respiratory arrest as indexed. Code I(b) COPD as a complication of the surgery reported on I(c). Code I(c) lobectomy to Sequela, surgical and medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure since it resulted in a chronic condition.

e. A condition with a duration of 1 year or more that was due to the external cause is reported.

I	(a) Subdural hematoma	1 year	T905	
	(b) Fall		&Y86	

Code I(a) subdural hematoma, T905, since it is reported to be of 1 year or more duration. Code I(b) fall, Y86, since it resulted in a condition of 1 year or more duration.

I	(a) Esophageal stricture	years	K222	
	(b) Ingestion of lye		T97	&Y870
II	Suicide attempt			

Code I(a) esophageal stricture as indexed. Code I(b) ingestion of lye, T97 Y870, since it resulted in a condition of 1 year or more duration.

f. The interval between the time of occurrence of the external cause and death is indicated to be 1 year or more, whether or not the residual (sequela) effect is specified.

Date of death 11/1/96

I	(a) Bronchopneumonia	J180	
MOD II	Contusion brain	T905	&Y850
1	Accident - Street		

Date of injury 5/20/95
Bicycle (operator) vs. truck

Code I(a) bronchopneumonia as indexed. Code sequela of nature of injury and external cause since the date of injury is 1 year or more prior to death.

I	(a) Cardiac arrest	I469		
	(b) Pacemaker failure	T983	&Y883	&I519
	(c) Had pacemaker implanted 3 years ago			

Code I(a) cardiac arrest as indexed. Code I(b) pacemaker failure to seqeula T983 and Y883 since duration is 3 years. Code I519 Disease, heart since pacemaker indicates a heart disease. Precede I519 with an ampersand as reason for the surgery. Do not enter a code on I(c).

g. The complication of the external cause classified to Chapters I-XVIII and the external cause is reported on the same line and the duration is 1 year or more.

I	(a) Radiation enteritis	3 years	Y883	K520
	(b) Lung cancer		&C349	

Code I(a) as a sequela of radiation therapy. Do not disregard the duration. Precede the code for the lung cancer with an ampersand to indicate the reason for medical care.

APPENDIX A

Standard Abbreviations and Symbols

When an abbreviation is reported on the certificate, refer to this list to determine what the abbreviation represents. If an abbreviation represents more than one term, determine the correct abbreviation by using other information on the certificate. If no determination can be made, use abbreviation for first term listed.

AAA	abdominal aortic aneurysm
AAS	aortic arch syndrome
AAT	alpha-antitrypsin
AAV	AIDS-associated virus
AB	abdomen; abortion; asthmatic bronchitis
ABD	abdomen
ABE	acute bacterial endocarditis
ABS	acute brain syndrome
ACA	adenocarcinoma
ACD	arteriosclerotic coronary disease
ACH	adrenal cortical hormone
ACT	acute coronary thrombosis
ACTH	adrenocorticotrophic hormone
ACVD	arterioscleroctic cardiovascular disease
ADEM	acute disseminated encephalomyelitis
ADH	antidiuretic hormone
ADS	antibody deficiency syndrome
AEG	air encephalogram
AF	auricular or atrial fibrillation; acid fast
AFB	acid-fast bacillus
AGG	agammaglobulinemia
AGL	acute granulocytic leukemia
AGN	acute glomerulonephritis
AGS	adrenogenital syndrome
AHA	acquired hemolytic anemia; autoimmune hemolytic anemia
AHD	arteriosclerotic heart disease
AHHD	arteriosclerotic hypertensive heart disease
AHG	anti-hemophilic globulin deficiency
AHLE	acute hemorrhagic leukoencephalitis
AI	aortic insufficiency; additional information
AIDS	acquired immunodeficiency syndrome
AKA	above knee amputation

APPENDIX A

Standard Abbreviations and Symbols

ALC	alcoholism
ALL	acute lymphocytic leukemia
ALS	amyotrophic lateral sclerosis
AMI	acute myocardial infarction
AML	acute myelocytic leukemia
ANS	arteriolonephrosclerosis
AOD	arterial occlusive disease
AODM	adult onset diabetes mellitus
AOM	acute otitis media
AP	angina pectoris; anterior and posterior repair; artificial pneumothorax; anterior pituitary
A&P	anterior and posterior repair
APC	auricular premature contraction; acetylsalicylic acid, acetophenetidin, and caffeine
APE	acute pulmonary edema; anterior pituitary extract
APH	antepartum hemorrhage
AR	aortic regurgitation
ARC	AIDS-related complex
ARDS	adult respiratory distress syndrome
ARF	acute respiratory failure
ARM	artificial rupture of membranes
ARV	AIDS-related virus
AS	arteriosclerotic; arteriosclerosis; aortic stenosis
ASA	acetylsalicylic acid (aspirin)
ASAD	arteriosclerotic artery disease
ASCAD	arteriosclerotic coronary artery disease
ASCD	arteriosclerotic coronary disease
ASCHD	arteriosclerotic coronary heart disease
ASCRD	arteriosclerotic cardiorenal disease
ASCVA	arteriosclerotic cerebrovascular accident
ASCVD	arteriosclerotic cardiovascular disease
ASCVR	arteriosclerotic cardiovascular renal disease
ASCVRD	arteriosclerotic cardiovascular renal disease
ASD	atrial septal defect
ASDHD	arteriosclerotic decompensated heart disease

APPENDIX A

Standard Abbreviations and Symbols

ASHCVD	arteriosclerotic hypertensive cardiovascular disease
ASHD	arteriosclerotic heart disease; atrioseptal heart defect
ASHHD	arteriosclerotic hypertensive heart disease
ASHVD	arteriosclerotic hypertensive vascular disease
ASO	arteriosclerosis obilterans
ASPVD	arteriosclerosis peripheral vascular disease
ASVD	arteriosclerotic vascular disease
ASVH(D)	arteriosclerotic vascular heart disease
ATC	all-terrain cycle
ATN	acute tubular necrosis
ATS	arteriosclerosis
ATSHD	arteriosclerotic heart disease
ATV	all-terrain vehicle
AUL	acute undifferentiated leukemia
AV	arteriovenous; atrioventricular; aortic valve
AVF	arterio-ventricular fibrillation; arteriovenous fistula
AVH	acute viral hepatitis
AVP	aortic valve prosthesis
AVR	aortic valve replacement
AWMI	anterior wall myocardial infarction
AZT	azidothymidine
BA	basilar artery; basilar arteriogram; bronchial asthma
B&B	bronchoscopy and biopsy
BBB	bundle branch block
B&C	biopsy and cauterization
BCE	basal cell epithelioma
BE	barium enema
BEH	benign essential hypertension
BGL	Bartholin's gland
BKA	below knee amputation
BL	bladder; bucolingual; blood loss; Burkett's lymphoma
BMR	basal metabolism rate
BNA	bladder neck adhesions
BNO	bladder neck obstruction
BOMSA	bilateral otitis media serous acute

APPENDIX A

Standard Abbreviations and Symbols

BOMSC	bilateral otitis media serous chronic
BOW	"bag of water" (membrane)
B/P, BP	blood pressure
BPH	benign prostate hypertrophy
BSA	body surface area
BSO	bilateral salpingo-oophorectomy
BSP	Bromosulfaphthalein (test)
BTL	bilateral tubal ligation
BUN	blood, urea, and nitrogen test
BVL	bilateral vas ligation
B&W	Baldy-Webster suspension (uterine)
BX	biopsy
BX CX	biopsy cervix
Ca	cancer
CA	cancer; cardiac arrest; carotid arteriogram
CABG	coronary artery bypass graft
CABS	coronary artery bypass surgery
CAD	coronary artery disease
CAG	chronic atrophic gastritis
CAO	coronary artery occlusion; chronic airway obstruction
CAS	cerebral arteriosclerosis
CASCVD	chronic arteriosclerotic cardiovascular disease
CASHD	chronic arteriosclerotic heart disease
CAT	computerized axial tomography
CB	chronic bronchitis
CBC	complete blood count
CBD	common bile duct; chronic brain disease
CBS	chronic brain syndrome
CCF	chronic congestive failure
CCI	chronic cardiac or coronary insufficiency
CF	congestive failure; cystic fibrosis; Christmas factor (PTC)
CFT	chronic follicular tonsillitis
CGL	chronic granulocytic leukemia
CGN	chronic glomerulonephritis
CHA	congenital hypoplastic anemia
CHB	complete heart block
CHD	congestive heart disease; coronary heart disease; congenital heart disease; Chediak-Higaski Disease

APPENDIX A

Standard Abbreviations and Symbols

CHF	congestive heart failure
C_2H_5OH	ethyl alcohol
CI	cardiac insufficiency; cerebral infarction
CID	cytomegalic inclusion disease
CIS	carcinoma in situ
CJD	Creutzfeldt-Jakob Disease
CLD	chronic lung disease; chronic liver disease
CLL	chronic lymphatic leukemia; chronic lymphocytic leukemia
CMID	cytomegalic inclusion disease
CML	chronic myelocytic leukemia
CMM	cutaneous malignant melanoma
CMV	cytomegalic virus
CNHD	congenital nonspherocytic hemolytic disease
CNS	central nervous system
CO	carbon monoxide
COAD	chronic obstructive airway disease
CO_2	carbon dioxide
COBE	chronic obstructive bullous emphysema
COBS	chronic organic brain syndrome
COFS	cerebro-oculo-facio-skeletal
COOMBS	test for Rh sensitivity
COLD	chronic obstructive lung disease
COPD	chronic obstructive pulmonary disease
COPE	chronic obstructive pulmonary emphysema
CP	cerebral palsy; cor pulmonale
C&P	cystoscopy and pyelography
CPB	cardiopulmonary bypass
CPC	chronic passive congestion
CPD	cephalopelvic disproportion; contagious pustular dermatitis
CPE	chronic pulmonary emphysema
CRD	chronic renal disease
CREST	calcinosis cutis, Raynaud's phenomenon, sclerodactyly, and telangiectasis
CRF	cardiorespiratory failure; chronic renal failure
CRST	calcinosis cutis, Raynaud's phenomenon, sclerodactyly, and telangiectasis
CS	coronary sclerosis; cesarean section; cerebro-spinal
CSF	cerebral spinal fluid
CSH	chronic subdural hematoma

APPENDIX A

Standard Abbreviations and Symbols

CSM	cerebrospinal meningitis
CT	computer tomography; cerebral thrombosis; coronary thrombosis
CTD	congenital thymic dysplasia
CU	cause unknown
CUC	chronic ulcerative colitis
CUP	cystoscopy, urogram, pyelogram (retro)
CUR	cystocele, urethrocele, rectocele
CV	cardiovascular; cerebrovascular
CVA	cerebral vascular accident
CV Accident	cerebral vascular accident
CVD	cardiovascular disease
CVHD	cardiovascular heart disease
CVI	cardiovascular insufficiency; cerebral vascular insufficiency
CVRD	cardiovascular renal disease
CWP	coal worker's pneumoconiosis
CX	cervix
DA	degenerative arthritis
DBI	phenformin hydrochloride
D&C	dilation and curettage
DCR	dacrocystorhinostomy
D&D	drilling and drainage; debridement and dressing
D&E	dilation and evacuation
DFU	dead fetus in utero
DIC	disseminated intravascular coagulation
DILD	diffuse infiltrative lung disease
DIP	distal interphalangeal joint; desquamative interstitial pneumonia
DJD	degenerative joint disease
DM	diabetes mellitus
DMT	dimethyltriptamine
DOA	dead on arrival
DOPS	diffuse obstructive pulmonary syndrome
DPT	diphtheria, pertussis, tetanus vaccine
DR	diabetic retinopathy
DS	Down's syndrome
DT	due to; delirium tremens
D/T	due to; delirium tremens
DU	diagnosis unknown; duodenal ulcer

APPENDIX A

Standard Abbreviations and Symbols

DUB	dysfunctional uterine bleeding
DUI	driving under influence
DVT	deep vein thrombosis
DWI	driving while intoxicated
DX	dislocation; diagnosis; disease
EBV	Epstein-Barr virus
ECCE	extracapsular cataract extraction
ECG	electrocardiogram
E coli	Escherichia coli
ECT	electric convulsive therapy
EDC	expected date of confinement
EEE	Eastern equine encephalitis
EEG	electroencephalogram
EFE	endocardial fibroelastosis
EGL	eosinophilic granuloma of lung
EH	enlarged heart; essential hypertension
EIOA	excessive intake of alcohol
EKC	epidemic keratoconjunctivitis
EKG	electrocardiogram
EKP	epikeratoprosthesis
ELF	elective low forceps
EMC	encephalomyocarditis
EMD	electromechanical dissociation
EMF	endomyocardial fibrosis
EMG	electromyogram
EN	erythema nodosum
ENT	ear, nose, and throat
EP	ectopic pregnancy
ER	emergency room
ERS	evacuation of retained secundines
ESRD	end-stage renal disease
EST	electric shock therapy
ETOH	alcohol
EUA	exam under anesthesia
EWB	estrogen withdrawal bleeding
FB	foreign body
FBS	fasting blood sugar
Fe	symbol for iron
FGD	fatal granulomatous disease
FHS	fetal heart sounds
FHT	fetal heart tone
FLSA	follicular lymphosarcoma

APPENDIX A

Standard Abbreviations and Symbols

FME	full-mouth extraction
FS	frozen section; fracture site
FT	full term
FTA	fluorescent treponemal antibody test
5FU	fluorouracil
FUB	functional uterine bleeding
FULG	fulguration
FUO	fever unknown origin
FX	fracture
FYI	for your information
GAS	generalized arteriosclerosis
GB	gallbladder; Guillain-Barre (syndrome)
GC	gonococcus; gonorrhea; general circulation (systemic)
GE	gastroesophageal
GEN	generalized
GI	gastrointestinal
GIT	gastrointestinal tract
GOK	God only knows
GSW	gunshot wound
GTT	glucose tolerance test
gtt	drop
GU	genitourinary; gastric ulcer
GVHR	graft-versus-host reaction
GYN	gynecology
HA	headache
HAA	hepatitis-associated antigen
HASCVD	hypertensive arteriosclerotic cardiovascular disease
HASCVR	hypertensive arteriosclerotic cardiovascular renal disease
HASHD	hypertensive arteriosclerotic heart disease
HC	Huntington's chorea
HCT	hematocrit
HCVD	hypertensive cardiovascular disease
HCVRD	hypertensive cardiovascular renal disease
HD	Hodgkin's disease; heart disease
HDN	hemolytic disease of newborn
HDS	herniated disc syndrome
HEM	hemorrhage

APPENDIX A

Standard Abbreviations and Symbols

HF	heart failure; hay fever
HGB; Hgb	hemoglobin
HHD	hypertensive heart disease
HIV	human immunodeficiency virus
HMD	hyaline membrane disease
HN_2	nitrogen mustard
HNP	herniated nucleus pulposus
H/O	history of
HPN	hypertension
HPVD	hypertensive pulmonary vascular disease
HRE	high-resolution electro-cardiology
HS	herpes simplex; Hurler's syndrome
HTLV	human T-cell lymphotropic virus
HTLV-III/LAV	human T-cell lymphotropic virus-III/lymphadenopathy-associated virus
HTLV-3	human T-cell lymphotropic virus-III
HTLV-III	human T-cell lymphotropic virus-III
HTN	hypertension
HVD	hypertensive vascular disease
Hx	history of
IADH	inappropriate antidiuretic hormone
IASD	interatrial septal defect
ICCE	intracapsular cataract extraction
ICD	intrauterine contraceptive device
I&D	infectious disease; incision and drainage
ID	infectious disease; incision and drainage
IDA	iron deficiency anemia
IDD	insulin-dependent diabetes
IDDI	insulin-dependent diabetes
IDDM	insulin-dependent diabetes mellitus
IGA	immunoglobin A
IHD	ischemic heart disease
IHSS	idiopathic hypertrophic subaortic stenosis
ILD	ischemic leg disease
IM	intramuscular; intramedullary; infectious mononucleosis
IMPP	intermittent positive pressure

APPENDIX A

Standard Abbreviations and Symbols

INAD	infantile neuroaxonal dystrophy
INC	incomplete
INE	infantile necrotizing encephalomyelopathy
INF	infection; infected; infantile; infarction
INH	Isoniazid; inhalation
INS	idiopathic nephrotic syndrome
IRHD	inactive rheumatic heart disease
ISD	interatrial septal defect
ITP	idiopathic thrombocytopenic purpura
IU	intrauterine
IUCD	intrauterine contraceptive device
IUD	intrauterine device (contraceptive); intrauterine death
IUP	intrauterine pregnancy
IV	intervenous; intravenous
IVC	intravenous cholangiography; inferior vena cava
IVCC	intravascular consumption coagulopathy
IVD	intervertebral disc
IVH	intraventricular hemorrhage
IVP	intravenous pyelogram
IVSD	intraventricular septal defect
IVU	intravenous urethrography
IWMI	inferior wall myocardial infarction
JBE	Japanese B encephalitis
KFS	Klippel-Feil syndrome
KS	Klinefelter's syndrome
KUB	kidney, ureter, bladder
K-W	Kimmelstiel-Wilson disease or syndrome
LAP	laparotomy
LAV	lymphadenopathy-associated virus
LAV/ HTLV-III	lymphadenopathy-associated virus/Human T-cell lymphotropic virus-III
LBBB	left bundle branch block
LBNA	lysis bladder neck adhesions
LBW	low birth weight
LBWI	low birth weight infant
LCA	left coronary artery
LDH	lactic dehydrogenase
LE	lupus erythematosus; lower extremity; left eye

APPENDIX A

Standard Abbreviations and Symbols

LKS	liver, kidney, spleen
LL	lower lobe
LLL	left lower lobe
LLQ	lower left quadrant
LMA	left mentoanterior (position of fetus)
LML	left middle lobe; left mesiolateral
LMCAT	left middle cerebral artery thrombosis
LML	left mesiolateral; left mediolateral (episiotomy)
LMP	last menstrual period; left mento- posterior (position of fetus)
LN	lupus nephritis
LOA	left occipitoanterior
LOMCS	left otitis media chronic serous
LP	lumbar puncture
LRI	lower respiratory infection
LS	lumbosacral; lymphosarcoma
LSD	lysergic acid diethylamide
LSK	liver, spleen, kidney
LUL	left upper lobe
LUQ	left upper quadrant
LV	left ventricle
LVF	left ventricular failure
LVH	left ventricular hypertrophy
MAC	mycobacterium avium complex
MAI	mycobacterium avium intracellulare
MAL	malignant
MBAI	mycobacterium avium intracellulare
MBD	minimal brain damage
MD	muscular dystrophy; manic depressive; myocardial damage
MDA	methylene dioxyamphetamine
MEA	multiple endocrine adenomatosis
MF	myocardial failure; myocardial fibrosis; mycosis fungoides
MGN	membranous glomerulonephritis
MHN	massive hepatic necrosis
MI	myocardial infarction; mitral insufficiency
MPC	meperidine, promethazine, chlorpromazine
MRS	methicillin resistant staphylococcal
MRSA	methicillin resistant staphylococcal aureus

APPENDIX A

Standard Abbreviations and Symbols

MRSAU	methicillin resistant staphylococcal aureus
MS	multiple sclerosis; mitral stenosis
MSOF	multi-system organ failure
MT	malignant teratoma
MUA	myelogram
MVP	mitral valve prolapse
MVR	mitral valve regurgitation; mitral valve replacement
NACD	no anatomical cause of death
NCA	neurocirculatory asthenia
NDI	nephrogenic diabetes insipidus
NEG	negative
NFI	no further information
NFTD	normal full-term delivery
NG	nasogastric
NH_3	symbol for ammonia
NIDD	non-insulin-dependent diabetes
NIDDI	non-insulin-dependent diabetes
NIDDM	non-insulin-dependent diabetes mellitus
N&V	nausea and vomiting
NVD	nausea, vomiting, diarrhea
OA	osteoarthritis
OAD	obstructive airway disease
OB	obstetrical
OBS	organic brain syndrome
OBST	obstructive; obstetrical
OD	overdose; oculus dexter (right eye); occupational disease
OHD	organic heart disease
OLT	orthotopic liver transplant
OM	otitis media
OMI	old myocardial infarction
OMS	organic mental syndrome
ORIF	open reduction, internal fixation
OS	oculus sinister (left eye); occipitosacral (fetal position)
OT	occupational therapy; old TB
OU	oculus uterque (each eye); both eyes
PA	pernicious anemia; paralysis agitans; pulmonary artery; peripheral arteriosclerosis
PAC	premature auricular contraction; phenacetin, aspirin, caffeine
PAF	paroxysmal auricular fibrillation
PAOD	peripheral arterial occlusive disease; peripheral arteriosclerosis occlusive disease
PAP	primary atypical pneumonia

APPENDIX A

Standard Abbreviations and Symbols

PAS	pulmonary artery stenosis
PAT	pregnancy at term; paroxysmal auricular tachycardia
Pb	chemical symbol for lead
PCD	polycystic disease
PCF	passive congestive failure
PCP	pentachlorophenol; pneumocystis carinii pneumonia
PCT	porphyria cutanea tarda
PCV	polycythemia vera
PDA	patent ductus arteriosus
PE	pulmonary embolism; pleural effusion; pulmonary edema
PEG	pneumoencephalography
PEGT	percutaneous endoscopic gastrostomy tube
PET	pre-eclamptic toxemia
PG	pregnant; prostaglandin
PGH	pituitary growth hormone
PH	past history; prostatic hypertrophy; pulmonary hypertension
PI	pulmonary infarction
PID	pelvic inflammatory disease; prolapsed intervertebral disc
PIE	pulmonary interstitial emphysema
PIP	proximal interphalangeal joint
PKU	phenylketonuria
PMD	progressive muscular dystrophy
PMI	posterior myocardial infarction; point of maximum impulse
PML	progressive multifocal leukoencephalopathy
PN	pneumonia; periarteritis nodosa; pyelonephritis
PO	postoperative
POC	product of conception
POE	point (or portal) of entry
PP	postpartum
POSS	possible; possibly
PPD	purified protein derivative test for tuberculosis
PPH	postpartum hemorrhage
PPLO	pleuropneumonia-like organism
PPS	postpump syndrome
PPT	precipitated; prolonged prothrombin time
PREM	prematurity
PROB	probably
PROM	premature rupture of membranes

APPENDIX A

Standard Abbreviations and Symbols

PSVT	paroxysmal supraventricular tachycardia
PT	paroxysmal tachycardia; pneumothorax; prothrombin time
PTA	persistent truncus arteriosus
PTC	plasma thromboplastin component
PTCA	percutaneous transluminal coronary angioplasty
PTLA	percutaneous transluminal laser angioplasty
PU	peptic ulcer
PUD	peptic ulcer disease; pulmonary disease
PUO	pyrexia of unknown origin
P&V	pyloroplasty and vagotomy
PVC	premature ventricular contraction
PVD	peripheral vascular disease; pulmonary vascular disease
PVI	peripheral vascular insufficiency
PVT	paroxysmal ventricular tachycardia
PVS	premature ventricular systole (contraction)
PWI	posterior wall infarction
PWMI	posterior wall myocardial infarction
PX	pneumothorax
R	right
RA	rheumatoid arthritis; right atrium; right auricle
RAAA	ruptured abdominal aortic aneurysm
RAD	radiation absorbed dose
RAI	radioactive iodine
RBBB	right bundle branch block
RBC	red blood cells
RCA	right coronary artery
RCS	reticulum cell sarcoma
RD	Raynaud's disease; respiratory disease
RDS	respiratory distress syndrome
RE	regional enteritis
REG	radioencephalogram
RESP	respiratory
RF	rheumatic fever
RHD	rheumatic heart disease
RLF	retrolental fibroplasia
RLL	right lower lobe
RLQ	right lower quadrant
RMCA	right middle cerebral artery
RMCAT	right middle cerebral artery thrombosis
RML	right middle lobe

APPENDIX A

Standard Abbreviations and Symbols

RMLE	right mediolateral episiotomy
RNA	ribonucleic acid
RND	radical neck dissection
R/O	rule out
RSA	reticulum cell sarcoma
RSR	regular sinus rhythm
Rt	right
RT	recreational therapy; right
RTA	renal tubular acidosis
RUL	right upper lobe
RUQ	right upper quadrant
RV	right ventricle
RVH	right ventricular hypertrophy
RVT	renal vein thrombosis
RX	drugs or other therapy or treatment
$\bar{s}$	without
SA	sarcoma; secondary anemia
SACD	subacute combined degeneration
SBE	subacute bacterial endocarditis
SBO	small bowel obstruction
SBP	spontaneous bacterial peritonitis
SC	sickle cell
SCC	squamous cell carcinoma
SCI	subcoma insulin; spinal cord injury
SD	spontaneous delivery; septal defect; sudden death
SDAT	senile dementia Alzheimer's type
SDII	sudden infant death in infancy
SDS	sudden death syndrome
SEPT	septicemia
SF	scarlet fever
SGA	small for gestational age
SH	serum hepatitis
SI	saline injection
SIADH	syndrome of inappropriate antidiuretic hormone
SICD	sudden infant crib death
SID	sudden infant death
SIDS	sudden infant death syndrome
SLC	short leg cast
SLE	systemic lupus erythematosus; Saint Louis encephalitis
SMR	submucous resection
SNB	scalene node biopsy
SO or S&O	salpingo-oophorectomy

APPENDIX A

Standard Abbreviations and Symbols

SOB	shortness of breath
SOM	secretory otitis media
SOR	suppurative otitis, recurrent
S/P	status post
SPD	sociopathic personality disturbance
SPP	suprapubic prostatectomy
SQ	subcutaneous
S/R	schizophrenic reaction; sinus rhythm
S/p P/T	schizophrenic reaction, paranoid type
SSE	soapsuds enema
SSKI	saturated solution potassium iodide
SSPE	subacute sclerosing panencephalitis
STAPH	staphylococcal; staphylococcus
STB	stillborn
STREP	streptococcal; streptococcus
STS	serological test for syphilis
STSG	split thickness skin graft
SUBQ	subcutaneous
SUD	sudden unexpected death
SUDI	sudden unexplained death of an infant
SUID	sudden unexpected infant death
SVC	superior vena cava
SVD	spontaneous vaginal delivery
SVT	supraventricular tachycardia
Sx	symptoms
SY	syndrome
T&A	tonsillectomy and adenoidectomy
TAH	total abdominal hysterectomy
TAL	tendon achilles lengthening
TAO	Triacetyloleandomycin (antibiotic); thromboangiitis obliterans
TAPVR	total anomalous pulmonary venous return
TAR	thrombocytopenia absent radius (syndrome)
TAT	tetanus anti-toxin
TB	tuberculosis; tracheobronchitis
TBC, Tbc	tuberculosis
TCI	transient cerebral ischemia
TEF	tracheoesophageal fistula
TF	tetralogy of Fallot
TGV	transposition great vessels

APPENDIX A

Standard Abbreviations and Symbols

THA	total hip arthroplasty
TI	tricuspid insufficiency
TIA	transient ischemic attack
TIE	transient ischemic episode
TL	tubal ligation
TM	tympanic membrane
TOA	tubo-ovarian abscess
TP	thrombocytopenic purpura
TR	tricuspid regurgitation, transfusion reaction
TSD	Tay-Sachs disease
TTP	thrombotic thrombocytopenic purpura
TUI	transurethral incision
TUR	transurethral resection (NOS) (prostate)
TURP	transurethral resection of prostate
TVP	total anomalous venous return
UC	ulcerative colitis
UGI	upper gastrointestinal
UL	upper lobe
UNK	unknown
UP	uteropelvic
UPJ	ureteropelvic junction
URI	upper respiratory infection
UTI	urinary tract infection
VAMP	vincristine, amethopterine, 6-mercaptopurine, and prednisone
VB	vinblastine
VC	vincristine
VD	venereal disease
VDRL	venereal disease research lab
VEE	Venezuelan equine encephalomyelitis
VF	ventricular fibrillation
VH	vaginal hysterectomy; viral hepatitis
VL	vas ligation
VM	viomycin
V&P	vagotomy and pyloroplasty
VPC	ventricular premature contractions
VR	valve replacement
VSD	ventricular septal defect
VT	ventricular tachycardia
WBC	white blood cell
WC	whooping cough
WE	Western encephalomyelitis

APPENDIX A

Standard Abbreviations and Symbols

W/O	without
WPW	Wolfe-Parkinson-White syndrome
YF	yellow fever
ZE	Zollinger-Ellison (syndrome)
'	minute
"	second(s)
↓	decreased
↑	increased; elevated
$\overline{c}$	with
$\overline{s}$	without
$\frac{00}{11}$	secondary to
$\frac{00}{11}$ to	secondary to

Appendix B

Synonymous Sites

When a condition of a stated anatomical site is indexed in Volume 3, code condition of stated site as indexed. If stated site is not indexed, code condition of synonymous site.

Alimentary canal	Gastrointestinal tract
Body	Trunk
Brain	Pons, frontal, temporal, parietal, occipital, prefrontal, anterior fossa, posterior fossa, III and IV ventricle, cerebral, cerebrum, basal ganglion, central nervous system Note: Do not use brain when ICD provides for CNS under the reported condition.
Cardiac	Heart
Chest	Thorax
Greater sac	Peritoneum
Hepatic	Liver
Hepatocellular	Liver
Intestine	Bowel, colon
Kidney	Renal
Lesser sac	Peritoneum
Pharynx	Throat
Pulmonary	Lung
Vocal cords	Larynx
Right\left hemispheric	Code brain
Hemispheric NOS	Do not assume brain
Right\left ventricle	Heart
Third\fourth ventricle	Brain
LLL, LUL, RUL, RML, RLL	Lobes of the lungs when reported with lobectomy, pneumonia, etc

Appendix C

Geographic Codes

State	FIPS Alpha	State	FIPS Alpha
Alabama	AL	Nebraska	NE
Alaska	AK	Nevada	NV
Arizona	AZ	New Hampshire	NH
Arkansas	AR	New Jersey	NJ
California	CA	New Mexico	NM
Colorado	CO	New York	NY
Connecticut	CT	North Carolina	NC
Delaware	DE	North Dakota	ND
District of Columbia	DC	Ohio	OH
Florida	FL	Oklahoma	OK
Georgia	GA	Oregon	OR
Hawaii	HI	Pennsylvania	PA
Idaho	ID	Puerto Rico	PR
Illinois	IL	Rhode Island	RI
Indiana	IN	South Carolina	SC
Iowa	IA	South Dakota	SD
Kansas	KS	Tennessee	TN
Kentucky	KY	Texas	TX
Louisiana	LA	Utah	UT
Maine	ME	Vermont	VT
Maryland	MD	Virginia	VA
Massachusetts	MA	Virgin Islands	VI
Michigan	MI	Washington	WA
Minnesota	MN	West Virginia	WV
Mississippi	MS	Wisconsin	WI
Missouri	MO	Wyoming	WY
Montana	MT		

Territories and Outlying Areas

American Samoa	AS	US Minor Outlying Islands	UM*
Federated States of Micronesia	FM	Baker Island	
Guam	GU	Howland Island	
Marshall Islands	MH	Jarvis Island	
Northern Mariana Islands	MP	Johnston Atoll	
Palau	PW	Kingman Reef	
Puerto Rico	PR	Midway Islands	
Virgin Islands (US)	VI	Navassa Island	
		Palmyra Atoll	
		Wake Island	

*Not recognized as a valid USPS State abbreviation

Appendix D

Code for Place of Injury

0. Home

Excludes: Abandoned or derelict house (8)
Home under construction, but not yet occupied (6)
Institutional place of residence (1)

About home
Apartment
Boarding house
Cabin (any type)
Caravan (trailer) park - residential
Condominium
Farm house
Hogan
Home premises
Home sidewalk
Home swimming pool
House (residential) (trailer)
Noninstitutional place of residence
Penthouse
Private driveway to home
Private garage
Private garden to home
Private walk to home
Private wall to home
Residence
Rooming house
Swimming pool in private home or garden
Townhome
Trailer camp or court
Yard (any part)
Yard to home

Appendix D

Code for Place of Injury

1. Residential institution

   Almshouse
   Army camp
   Board and care facility
   Children's home
   Convalescent home
   Dormitory
   Fraternity house
   Halfway house
   Home for the sick
   Hospice
   Institution (any type)
   Jail
   Military (camp) (reservation)
   Nurse's home
   Nursing home
   Old people's home
   Orphanage
   Penitentiary
   Pensioner's home
   Prison
   Prison camp
   Reform school
   Retirement home
   Sorority house
   State hospital

2. School, other institution and public administrative area

Excludes: Building under construction (6)
Residential institution (1)
Sports and athletic areas (3)

Armory
Assembly hall
Campus
Child center
Church
Cinema
Clubhouse
College
Country club (grounds)
Court house
Dance hall
Day nursery (Day care)
Drive in theater
Fire house
Gallery
Health club
Health resort
Health spa
Hospital
Institute of higher learning
Kindergarten
Library
Mission
Movie house
Museum
Music hall
Night club
Opera house
Playground, school
Police precinct
Police station or cell
Post office
Private club
Public building
Public hall
Salvation army
School (grounds) (yard)
School (private) (public) (state)
Theatre
Turkish bath
University
YMCA
Youth center
YWCA

3. Sports and athletics area

   Excludes: Swimming pool or tennis court in private home or garden (0)

   Baseball field
   Basketball court
   Cricket ground
   Dude ranch
   Fives court
   Football field
   Golf course
   Gymnasium
   Hockey field
   Ice palace
   Racecourse
   Riding school
   Rifle range - NOS
   Skating rink
   Sports ground
   Sports palace
   Squash court
   Stadium
   Swimming pool (public) (private)
   Tennis court

4. Street and highway

   Alley
   Border crossing
   Bridge NOS
   Freeway
   Interstate
   Motorway
   Named street/highway/interstate
   Pavement
   Road
   Roadside
   Sidewalk NOS

5. Trade and service area

Excludes: Garage in private home (0)

Airport
Bank
Bar
Body shop
Cafe
Casino
Electric company
Filling station
Funeral home
Garage - place of work
Garage away from highway except home
Garage building (for car storage)
Garage NOS
Gas station
Hotel
Loading platform - store
Market (grocery or other commodity)
Motel
Office (building)
Radio/television broadcasting station
Restaurant
Salvage lot, named
Service station
Shop, commercial
Shopping center (Shopping mall)
Station (bus) (railway)
Store
Subway (stairs)
Tourist court
Tourist home
Warehouse

6. Industrial and construction areas

Building under construction
Coal pit
Coal yard
Construction job
Dairy processing plant
Dockyard
Dry dock
Electric tower
Factory (building) (premises)
Foundry
Gas works
Grain elevator
Gravel pit
Highway under construction
Industrial yard
Loading platform - factory
Logging operation area
Lumber yard
Mill pond
Oil field
Oil rig and other offshore installations
Oil well
Plant, industrial
Power-station (coal) (nuclear) (oil)
Produce building
Railroad track or trestle
Railway yard
Sand pit
Sawmill
Sewage disposal plant
Shipyard
Shop
Substation (power)
Subway track
Tannery
Tunnel under construction
Wharf
Workshop

7. Farm

Excludes: Farm house and home premises of farm (0)

Barn NOS
Barnyard
Corncrib
Cornfield
Dairy (farm) NOS
Farm buildings
Farm pond or creek
Farmland under cultivation
Field, numbered or specialized
Gravel pit on farm
Orange grove
Pasture
Ranch NOS
Range NOS
Silo
State Farm

Appendix D

Code for Place of Injury

8. Other specified places

Abandoned gravel pit
Abandoned public building or home
Air force firing range
Bar pit or ditch
Beach NOS (private) (named)
Beach resort
Boy's camp
Building NOS
Camp
Camping grounds
Campsite
Canal
Caravan site NOS
Cemetery
City dump
Creek (bank) (embankment)
Damsite
Derelict house
Desert
Ditch
Dock NOS
Excavation site
Fairgrounds
Field NOS
Forest
Fort
Harbor
Hill
Holiday camp
Irrigation canal or ditch
Junkyard
Lake NOS
Lake resort
Manhole
Marsh
Military training ground
Mountain
Mountain resort
Named city
Named lake
Named room
Named town
Nursery NOS
Open field
Park (any) (amusement) (public)
Parking lot
Parking place
Pier
Pipeline (oil)
Place of business NOS
Playground NOS
Pond or pool (natural)
Power line pole
Prairie
Private property
Public place NOS
Public property
Railway line
Reservoir (water)
Resort NOS
River
Sea
Seashore NOS
Seashore resort
Sewer
Specified address
Stream
Swamp
Vacation resort
Woods
Zoo

9. Unspecified place

Bed
Commode
Country
Downstairs
Fireplace
Hot tub
Jobsite
Near any place
On job
Parked car
Sofa
Table
Tree
Vehicle (any)

Appendix E

Activity Codes

The ICD-10 provides a subclassification for use with external causes and injuries to indicate the activity of the injured person at the time the event occurred. This appendix is designed to document the ICD-10 activity code information but it is not entered in manual coding.

Information may be scattered over different parts of the medical certification, Part I, Part II, 41, 43, etc. However, do not use the information in "Injury at work?" block to code this variable.

If no information concerning the activity of the injured person is reported on the certificate, the item is left blank. "While drinking alcohol" or "while driving" is not considered as a codable activity. When two or more codes appear to be appropriate for the information reported, activity code 8 is assigned.

0 While engaged in sports activity

Physical exercise with a described functional element such as:
. golf
. jogging
. riding
. school athletics
. skiing
. swimming
. trekking
. waterskiing

1 While engaged in leisure activity

Hobby activities
Leisure time activities with an entertainment element such as going to the cinema, to a dance or to a party
Participation in sessions and activities of voluntary organizations

Excludes: sport activities (0)

2 While working for income

Paid work (manual) (professional)
Transportation (time) to and from such activities
Work for salary, bonus and other types of income

Appendix E

Activity Codes

3 While engaged in other types of work

Domestic duties such as:
. caring for children and relatives
. cleaning
. cooking
. gardening
. household maintenance
Duties for which one would not normally gain an income
Learning activities, e.g. attending school session or lesson
Undergoing education

4 While resting, sleeping, eating and other vital activities

Personal hygiene

8 While engaged in other specified activities

Appendix F

Substitute Codes

The following categories are invalid for use in coding and processing the multiple cause data. Substitute code(s) for use in multiple cause coding appears in the right column.

Use the following substitute codes when conditions classifiable to the following codes are reported:

Invalid Code	Substitute Code	Invalid Code	Substitute code
A150	A162	F708	F70 (3-characters only)
A151	A162	F709	F70 (3-characters only)
A152	A162	F710	F71 (3-characters only)
A153	A162	F711	F71 (3-characters only)
A154	A163	F718	F71 (3-characters only)
A155	A164	F719	F71 (3-characters only)
A156	A165	F720	F72 (3-characters only)
A157	A167	F721	F72 (3-characters only)
A158	A168	F728	F72 (3-characters only)
A159	A169	F729	F72 (3-characters only)
A160	A162	F730	F73 (3-characters only)
A161	A162	F731	F73 (3-characters only)
B95-B97	Code the disease(s) classified to other chapters modified by the organism. Do not enter a code for the organism.	F738	F73 (3-characters only)
		F739	F73 (3-characters only)
		F780	F78 (3-characters only)
F700	F70 (3-characters only)	F781	F78 (3-characters only)
F701	F70 (3-characters only)	F788	F78 (3-characters only)

Appendix F

Substitute Codes

Invalid Code	Substitute Code	Invalid Code	Substitute Code
F789	F78 (3-characters only)	T010, T011, T016, T018	Open wound of specified sites
F790	F79 (3-characters only)	T020, T026, T027	Fractures of specified sites
F791	F79 (3-characters only)	T030, T034	Dislocations, sprains, and strains of specified sites
F798	F79 (3-characters only)	T040, T044, T047	Crushing injuries of specified sites
F799	F79 (3-characters only)	T051, T054, T056	Traumatic amputations of specified site
I150	I129	T060, T061, T068	Injuries of specified sites
I151-I152 I158-I159	R99	T29.-	Burns of specified sites
I23.-	I21-I22		
I24.0	I21 or I22		
I65.-	I63		
I66.-	I63		
O80	O95		
O81-084	O759		
P95	P969		
R69	R95-R99		
T000, T001, T006	Superficial injuries of specified sites		

Appendix G

Terrorism Classification (*U01 - *U03)

Terrorism Classification (*U01 - *U03)

NCHS has developed a set of new codes within the framework of the ICD that will allow the identification of deaths from terrorism reported on death certificates through the National Vital Statistics System. Terrorism-related ICD-10 codes for mortality have been assigned to the "U" category which has been designated by WHO for use by individual countries. The asterisk preceding the alphanumeric code indicates the code was introduced by the United States and is not officially part of the ICD.

To classify a death as terrorist-related, it is necessary for the incident to be designated as such by the Federal Bureau of Investigation (FBI). Neither a medical examiner nor a coroner who would be completing/certifying the death certificate, nor the nosologist coding the death certificate would determine that an incident is an act of terrorism. If an incident or event is confirmed by the FBI as terrorism, it may be so described on the certificate. If the incident is confirmed as terrorism after the death certificate is completed, the certificate can be recorded at a later date.

Not to be used unless notified by NCHS.

Tabular List

Assault (homicide)
***U01-*U02**

***U01** **Terrorism**
Includes: assault-related injuries resulting from the unlawful use of force or violence against persons or property to intimidate or coerce a Government, the civilian population, or any segment thereof, in furtherance of political or social objectives

***U01.0** **Terrorism involving explosion of marine weapons**
Depth-charge
Marine mine
Mine NOS, at sea or in harbor
Sea-based artillery shell
Torpedo
Underwater blast

Appendix G

Terrorism Classification (*U01 - *U03)

***U01.1** **Terrorism involving destruction of aircraft**
Includes: aircraft used as a weapon

Aircraft:
- burned
- exploded
- shot down

Crushed by falling aircraft

***U01.2** **Terrorism involving other explosions and fragments**
Antipersonnel bomb (fragments)
Blast NOS
Explosion (of):
- NOS
- artillery shell
- breech-block
- cannon block
- mortar bomb
- munitions being used in terrorism
- own weapons

Fragments from:
- artillery shell
- bomb
- grenade
- guided missile
- land-mine
- rocket
- shell
- shrapnel

Mine NOS

Appendix G

Terrorism Classification (*U01 - *U03)

***U01.3 Terrorism involving fires, conflagration and hot substances**

Asphyxia, Burns, Other injury } originating from fire caused directly by fire-producing device or indirectly by any conventional weapon

Petrol bomb

Collapse of, Fall from, Hit by object, Falling from, Jump from } burning building or structure

Conflagration

Fire, Melting, Smoldering } of fittings or furniture

***U01.4 Terrorism involving firearms**

Bullet:
- carbine
- machine gun
- pistol
- rifle
- rubber (rifle)

Pellets (shotgun)

***U01.5 Terrorism involving nuclear weapons**

Blast effects
Exposure to ionizing radiation from nuclear weapon
Fireball effects
Heat
Other direct and secondary effects of nuclear weapons

Appendix G

Terrorism Classification (*U01 - *U03)

***U01.6** **Terrorism involving biological weapons**
Anthrax
Cholera
Smallpox

***U01.7** **Terrorism involving chemical weapons**
Gases, fumes and chemicals:
- Hydrogen cyanide
- Phosgene
- Sarin

***U01.8** **Terrorism, other specified**
Lasers
Battle wounds
Piercing or stabbing object injuries
Drowned in terrorist operations NOS

***U01.9** **Terrorism, unspecified**

***U02** **Sequelae of terrorism**

Appendix G

Terrorism Classification (*U01 - *U03)

Intentional self-harm (suicide)
***U03**

***U03 Terrorism**

***U03.0 Terrorism involving explosions and fragments**
Includes: destruction of aircraft used as a weapon

Aircraft:
- burned
- exploded
- shot down

Antipersonnel bomb (fragments)
Blast NOS
Explosion (of):
- NOS
- artillery shell
- breech-block
- cannon block
- mortar bomb
- munitions being used in terrorism
- own weapons

Fragments from:
- artillery shell
- bomb
- grenade
- guided missile
- land-mine
- rocket
- shell
- shrapnel

Mine NOS

***U03.9 Terrorism by other and unspecified means**

Appendix G

Terrorism Classification (*U01 - *U03)

Alphabetical Index

Crushed
- between objects (moving) (stationary and moving)
- by, in
- - falling
- - - aircraft
- - - - in terrorism U01.1

Cut, cutting (any part of body) (by) (*see also* Contact, with, by object or machine)
- terrorism U01.8

Drowning
- in
- - terrorism U01.8

Effects(s) (adverse) of
- nuclear explosion or weapon in terrorism (blast) (direct) (fireball) (heat) (radiation) (secondary) U01.5

Explosion (in) (of) (on) (with secondary fire)
- terrorism U01.2

Exposure to
- fire (with exposure to smoke or fumes or causing burns, or secondary explosion)
- - in, of, on, starting in
- - - terrorism (by fire-producing device) U01.3
- - - - fittings or furniture (burning building) (uncontrolled fire) U01.3
- - - - from nuclear explosion U01.5

Fall, falling
- from, off
- - building
- - - burning (uncontrolled fire)
- - - - in terrorism U01.3
- - structure NEC
- - - burning (uncontrolled fire)
- - - - in terrorism U01.3

Fireball effects from nuclear explosion in terrorism U01.5

Heat (effects of) (excessive)
- from
- - nuclear explosion in terrorism U01.5

Injury, injured NEC
- by, caused by, from
- - terrorism – *see* Terrorism
- due to
- - terrorism – *see* Terrorism

Appendix G

Terrorism Classification (*U01 - *U03)

Jumped, jumping
- from
- - building (*see also* Jumped, from, high place)
- - - burning (uncontrolled fire)
- - - - in terrorism U01.3
- - structure (*see also* Jumped, from, high place)
- - - burning (uncontrolled fire)
- - - - in terrorism U01.3

Poisoning (by) (*see also* Table of drugs and chemicals)
- in terrorism (chemical weapons) U01.7

Radiation (exposure to)
- in
- - terrorism (from or following nuclear explosion) (direct) (secondary) U01.5
- - - laser(s) U01.8
- laser(s)
- - in terrorism U01.8

Sequelae (of)
- in terrorism U02

Shooting, shot (*see also* Discharge, by type of firearm)
- in terrorism U01.4

Struck by
- bullet (*see also* Discharge, by type of firearm)
- - in terrorism U01.4
- missile
- - in terrorism – *see* Terrorism, missile
- object
- - falling
- - - from, in, on
- - - - building
- - - - - burning (uncontrolled fire)
- - - - - - in terrorism U01.3

Suicide, suicidal, (attempted) (by)
- explosive(s) (material)
- - in terrorism U03.0
- in terrorism U03.9

Terrorism (by) (in) (injury) (involving) U01.9
- air blast U01.2
- aircraft burned, destroyed, exploded, shot down U01.1
- - used as a weapon U01.1.
- anthrax U01.6

Terrorism----*continued*
- asphyxia from
- - chemical (weapons) U01.7
- - fire, conflagration (caused by fire-producing device) U01.3
- - - from nuclear explosion U01.5
- - gas or fumes U01.7
- bayonet U01.8
- biological agents (weapons) U01.6
- blast (air) (effects) U01.2
- - from nuclear explosion U01.5
- - underwater U01.0
- bomb (antipersonnel) (mortar) (explosion) (fragments) U01.2
- - petrol U01.3
- bullet(s) (from carbine, machine gun, pistol, rifle, rubber (rifle), shotgun) U01.4
- burn from
- - chemical U01.7
- - fire, conflagration (caused by fire-producing device) U01.3
- - - from nuclear explosion U01.5
- - gas U01.7
- burning aircraft U01.1
- chemical (weapons) U01.7
- cholera U01.6
- conflagration U01.3
- crushed by falling aircraft U01.1
- depth-charge U01.0
- destruction of aircraft U01.1
- disability as sequelae one year or more after injury U02
- drowning U01.8
- effect (direct) (secondary) of nuclear weapon U01.5
- - sequelae U02
- explosion (artillery shell) (breech-block) (cannon block) U01.2
- - aircraft U01.1
- - bomb (antipersonnel) (mortar) U01.2
- - - nuclear (atom) (hydrogen) U01.5
- - depth-charge U01.0
- - grenade U01.2
- - injury by fragments (from) U01.2
- - land-mine U01.2
- - marine weapon(s) U01.0

Terrorism----*continued*
- - mine (land) U01.2
- - - at sea or in harbor U01.0
- - - marine U01.0
- - missile (explosive) (guided) NEC U01.2
- - munitions (dump) (factory) U01.2
- - nuclear (weapon) U01.5
- - other direct and secondary effects of U01.5
- - own weapons U01.2
- - sea-based artillery shell U01.0
- - torpedo U01.0
- exposure to ionizing radiation from nuclear explosion U01.5
- falling aircraft U01.1
- fire or fire-producing device U01.3
- firearms U01.4
- fireball effects from nuclear explosion U01.5
- fragments from artillery shell, bomb NEC, grenade, guided missile, land-mine, rocket, shell, shrapnel U01.2
- gas or fumes U01.7
- grenade (explosion) (fragments) U01.2
- guided missile (explosion) (fragments) U01.2
- - nuclear U01.5
- heat from nuclear explosion U01.5
- hot substances U01.3
- hydrogen cyanide U01.7
- land-mine (explosion) (fragments) U01.2
- laser(s) U01.8
- late effect (of) U02
- lewisite U01.7
- lung irritant (chemical) (fumes) (gas) U01.7
- marine mine U01.0
- mine U01.2
- - at sea U01.0
- - in harbor U01.0
- - land (explosion) (fragments) U01.2
- - marine U01.0
- missile (explosion) (fragments) (guided) U01.2
- - marine U01.0
- - nuclear U01.5

Terrorism----*continued*

- mortar bomb (explosion) (fragments) U01.2
- mustard gas U01.7
- nerve gas U01.7
- nuclear weapons U01.5
- pellets (shotgun) U01.4
- petrol bomb U01.3
- piercing object U01.8
- phosgene U01.7
- poisoning (chemical) (fumes) (gas) U01.7
- radiation, ionizing from nuclear explosion U01.5
- rocket (explosion) (fragments) U01.2
- saber, sabre U01.8
- sarin U01.7
- screening smoke U01.7
- sequelae effect (of) U02
- shell (aircraft) (artillery) (cannon) (land-based) (explosion) (fragments) U01.2
- - sea-based U01.0
- shooting U01.4
- - bullet(s) U01.4
- - pellet(s) (rifle) (shotgun) U01.4
- shrapnel U01.2
- smallpox U01.6
- stabbing object(s) U01.8
- submersion U01.8
- torpedo U01.0
- underwater blast U01.0
- vesicant (chemical) (fumes) (gas) U01.7
- weapon burst U01.2

Appendix G

Terrorism Classification (*U01 - *U03)

Date of death 9/11/2001

PLACE 5 — I (a) Burns — T300

(b) Terrorist attack on the Pentagon — &U011

MOD 3 — II

Homicide	The Pentagon	Date of injury 9/11/2001

Code as terrorism involving destruction of aircraft. The FBI declared the Pentagon incident an act of terrorism.

Date of death 9/11/2001

PLACE 5 — I (a) Chest trauma — S299

(b)

MOD 3 — II World Trade Center Disaster — &U011

Homicide	World Trade Center	Date of injury 9/11/2001

Code as terrorism involving destruction of aircraft. The FBI declared the World Trade Center incident an act of terrorism.

Appendix H

Additional Drug Examples

1. Place 9 I (a) Ingested overdose of opiates and ingested alcohol T406 &X42 F109

   Code I(a) nature of injury and external cause code for opiate overdose. Code ingested alcohol as indexed. No evidence of alcohol and drug synergism is reported.

2. Place 9 I (a) Ingested overdose of (opiates) and ingested alcohol T406 &X42 F109

   Code I(a) nature of injury and external cause code for opiate overdose. Code ingested alcohol as indexed. No evidence of alcohol and drug synergism is reported.

3. Place 9 I (a) Intoxication by the use of cocaine and opiates T405 &X42 T406

   Code I(a) nature of injury and external cause code for cocaine and opiate intoxication. Since the drugs are assigned to the same external cause code, code X42. Do not enter a Chapter V code (F codes).

4. Place 9 I (a) Intoxication by the use of (cocaine and opiates) T405 &X42 T406

   Code I(a) nature of injury and external cause code for cocaine and opiates intoxication. Since the drugs are assigned to the same external cause code, code X42. Do not enter a Chapter V code (F codes).

5. Place 9 I (a) Toxic effects of cocaine abuse T405 &X42 F141

   Interpret I(a) as cocaine poisoning and cocaine abuse. Code nature of injury and external cause code for cocaine poisoning and cocaine abuse as indexed.

6. Place 9 I (a) Toxic effects of illicit drug abuse T509 &X44 F191

   Interpret I(a) as drug poisoning and drug abuse. Code nature of injury and external cause code for drug poisoning and drug abuse as indexed.

7. Place 9 I (a) Mixed drug intoxication alcohol and cocaine T519 X45 T405 &X42

   Interpret I(a) as poisoning and code nature of injury and external cause code for alcohol and cocaine. Precede the external cause code for the cocaine poisoning with an ampersand.

Appendix H

Additional Drug Examples

8. Place 9 — I (a) Mixed drug intoxication (alcohol and cocaine) T519 X45 T405 &X42
(b)
II Used combination cocaine and alcohol F149 F109

Interpret I(a) as poisoning and code nature of injury and external cause code for alcohol and cocaine. Precede the external cause code for cocaine poisoning with an ampersand. Code Part II, cocaine use as listed under dependence and alcohol use as indexed.

9. Place 9 — I (a) Multiple drug intoxication including T509 &X44 T402 T424 T430
(b) oxycodone, diazepam, and doxepin

Code the nature of injury code for drug NOS as first entry on I(a). Since the drugs are assigned to different external cause codes, code X44 followed by the nature of injury code for each drug reported.

10. Place 9 — I (a) Acute multiple drug intoxication (oxycodone T402 &X44 T424
(b) and alprazolam)
II Took overdose T509

Code I(a) nature of injury and external cause code for oxycodone and alprazolam intoxication. Since the drugs are assigned to different external cause codes, code X44. Code the nature of injury code for drug NOS in Part II.

11. Place 9 — I (a) Acute multiple drug intoxication (ethanol, F100 T402 &X44 T424
(b) oxycodone and alprazolam)

Code first entry I(a) ethanol intoxication as indexed. Code nature of injury and external cause code for oxycodone and alprazolam intoxication. Since the drugs are assigned to different external cause codes, code X44. No evidence of alcohol and drug synergism is reported.

12. Place 9 — I (a) Acute intoxication due to ethanol F100
(b) abuse, opiate abuse F101 F111
MOD 1 — II Drug reaction T509 &X44

Accident

Code I(a) and (b) as indexed. Code Part II to drug poisoning since drug NOS is reported and the certifier stated the death was due to an accident.

Appendix H

Additional Drug Examples

13. Place 9 MOD 1 — I (a) Cardiac arrhythmia associated with hydroxyzine injection — I499 T435 &X41
(b)
(c)
II Hydroxyzine injection — T435

Accident

Code first condition on I(a) as indexed. Code hydroxyzine injection as poisoning since it is a psychotropic drug and the certifier reported the death was due to an accident. Code nature of injury for hydroxyzine Part II.

14. I (a) Cardiac arrhythmia associated with hydroxyzine injection — I499
(b)
(c)
II Hydroxyzine injection

Code first condition on I(a) as indexed. No code required for the hydroxyzine injection since no complication is reported. It is considered drug therapy since the certifier did not report accident or undetermined in the manner of death block.

15. Place 9 — I (a) Acute cardiac arrhythmia precipitated by cocaine and opiates — I499 T405 &X42 T406
(b)
(c)
II Drug abuse, cocaine and opiates — F141 F111

Accident

Code first condition on I(a) as indexed. Code cocaine and opiates as poisoning since the drugs are narcotics and the certifier reported the death was due to an accident. Code the nature of injury and external cause code for cocaine and opiate poisoning. Since the drugs are assigned to the same external cause code, code X42. Code cocaine abuse and opiates abuse as indexed in Part II.

16. Place 9 — I (a) Acute intravenous narcotism (heroin) — F112
(b)
II Methadone overdose, heroin injection — T403 &X42 T401

Code I(a) F112, acute intravenous heroin narcotism. Consider the methadone overdose and heroin injection as poisoning. Heroin is not used for medical care purposes.

Appendix H

Additional Drug Examples

Place 9 I (a) Acute intravenous narcotism heroin overdose F192 T401 &X42

Intrepret I(a) as two separate entities. Code acute intravenous narcotism as first entity and code a nature of injury and an external cause code for heroin overdose as second entity.

17. Place 9 I (a) Acute intravenous narcotism F112
(b) Morphine
II Intravenous use of drugs F199

Consider I(b) as continuation of I(a). Code I(a) acute intravenous morphine narcotism and Part II as indexed.

18. I (a) Drug dependence (heroin, cocaine) F112 F142

Code I(a) heroin and cocaine dependence as indexed.